

**MALE INVOLVEMENT AND PARTICIPATION IN
PREVENTION OF MOTHER TO CHILD
TRANSMISSION (PMTCT) OF HIV/AIDS IN
CHIPATA DISTRICT**

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LIST OF ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
ANC	-	Antenatal Clinic
CIDRZ	-	Centre for Infectious Diseases Research in Zambia
CSO	-	Central Statistics Office
DMO	-	District Medical Officer
FGD	-	Focus Group Discussion
HC	-	Health Centre
HIV	-	Human Immunodeficiency Virus
HMIS	-	Hospital Management Information System
IEC	-	Information Education and Communication
MCH	-	Maternal and Child Health
MDGs	-	Millennium Development Goals
MoH	-	Ministry of Health
MTCT	-	Mother to Child Transmission
NGOs	-	Non-Governmental Organizations
NMCHC	-	National Maternal and Child Health Centre
PGNC	-	Pentecostal Good News Church
PMO	-	Provincial Medical Officer
PMTCT	-	Prevention of Mother to Child Transmission
PPL	-	Pentecostal Prince of Life
PS	-	Permanent Secretary
RCC	-	Roman Catholic Church
RCCG	-	Reformed Christian Church of God
RCZ	-	Reformed Church in Zambia
RTA	-	Road Traffic Accident
SafAIDS	-	Southern African AIDS Information Dissemination Service
SDA	-	Seventh-Day Adventist Church
STIs	-	Sexually Transmitted Infections
UNAIDS	-	United Nations Programmes on HIV/AIDS

UNICEF	-	United Nations International Children Emergency Fund
VCT	-	Voluntary Counselling and Testing
ZDHS	-	Zambia Demographic Health Survey
ZDV	-	Zidovudine

DECLARATION

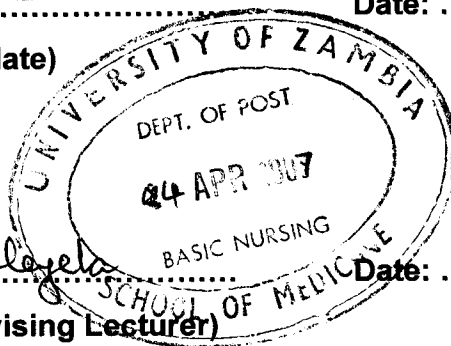
I, hereby declare that the work presented in this study for a Bachelor of Science Degree in Nursing has not been presented either wholly or in part, for any other degree and is not being currently submitted to any other degree.

Signed:
(Candidate)

Date: 02-04-2007

Approved:

(Supervising Lecturer)



Date: 02/04/2007

STATEMENT

I, **Rodgers Gift Benkele**, do hereby certify that this study is entirely the result of my own independent investigations. The various sources to which I am indebted are clearly indicated in the text and reference.

Signed: 

Date: 02-04-2007

DEDICATION

To

*My wife Emma Benkele whose patience and consideration sustained me through the
years of my studies*

To

My sons Chipego Benkele and Mazuba Benkele for their understanding

To

*My parents Robert Siabeka Benkele and Esnart Mutinta Benkele whose love and affection
inspired this endeavour*

And

To

*The child who has innocently become the victim of HIV/AIDS and the mother and father
devoted to prevention of transmission of HIV from the parents to the child. .*

ABSTRACT

The HIV/AIDS epidemic is the most far reaching and damaging epidemic the world has ever seen. The epidemic has not only resulted in high morbidity and mortality among Zambians, but it continues to pose a great challenge on the Zambian economy. The costs spent on HIV/AIDS programmes are high. One such programme is PMTCT. The Ministry of Health (MoH) in 1998 formed the Mother To Child Team (MTCT) working group to spearhead and coordinate activities related to prevention of MTCT (MoH, 1999). The group was later referred to as Prevention of Mother to Child Transmission (PMTCT) working group. Since then PMTCT programmes have been supported by MoH and strategic plans have been developed to scale up the implementation of these programmes. In Zambia PMTCT is a concept which is nearly 8 years old.

The purpose of this study was to determine the factors influencing male involvement and participation in PMTCT programmes in Chipata District. Since men are powerful decision makers; their involvement and participation in PMTCT programmes can positively or negatively influence the utilisation of PMTCT services and also curb the spread of HIV. Literature review for this study is from various scholars globally, regionally and nationally.

A non experimental qualitative research approach using the exploratory study design was used for this study. This study design enabled the researcher gain insight and understanding of the factors that influence male involvement and participation in PMTCT programmes.

The research participants were selected using purposive sampling method through the use of participation criteria. Thirty nine (39) males and eleven (11) females participated in the study and data was collected through four (4) FGDs. Data was analysed using content analysis. The codes that were drawn from the analysis were entered into the computer software SPSS 9.0 for windows. A

SHARP scientific and statistical calculator was further used to draw and present data using frequency tables, pie charts and cross tabulations.

The study has revealed that males in Chipata district are not adequately participating in PMTCT programmes. The study also revealed that both male and female participants were involved in HIV risky traditional practices which comprised of smearing semen on baby's body (Kukonza mwana) at three to four months old and tattooing of the baby. This is mainly due to lack of information on PMTCT, as there is no direct communication between PMTCT staff and the males. The PMTCT programme has been integrated in ANC, which traditionally mainly offered care to pregnant women. Therefore, men naturally felt left out despite having positive views regarding roles they can play PMTCT programmes.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Zambia is a landlocked country in the Sub-Saharan Africa with a population of approximately 10 million people and an estimated Human Immunodeficiency Virus (HIV) prevalence of 16 % overall (Central Statistical Office, 2003). The Zambia Sentinel Surveillance conducted in 2002 by Central Statistics Office (CSO) reported that the rate among antenatal clinic (ANC) attendances was 19%. The rate is higher in urban areas. At the end of 2001, it was estimated that 1.2 million Zambians were living with HIV/AIDS, with over half of these infections in women and approximately 150, 000 infections in children (Ministry of Health, 2004).

The 2004 United Nations Programmes on HIV/AIDS (UNAIDS) reports that, as at the end of 2003, 16.5% adults aged between 15–49 years were infected with HIV, out of which the higher percentage were women. This data indicates that the larger population infected are the women. Factors contributing to the high prevalence of HIV among women could be their biological vulnerability, their low economic status and their lack of assertiveness.

The socioeconomic impact of HIV /AIDS in Zambia is enormous. HIV /AIDS has left an estimated 620,000 orphans, 6% of these are on the street and 1% in orphanages (National AIDS Council, 2004). It is estimated that approximately 30,000 children become infected with HIV each year in Zambia (Ministry of Health, 2004). The National AIDS Council (2004), further reports that 40% of babies born to HIV infected mothers are infected with the virus. This situation has caused the paediatric wards to become increasingly populated with chronically ill

and dying children leading to low bed turn over because these patients stay longer in the wards.

In recent years, the evidence in support of feasible interventions to reduce Mother to Child transmission (MTCT) of HIV has been growing. In 1994, research showed that three months treatment with the drug Zidovudine (ZDV) for the mother at the end of pregnancy, with an intravenous loading dose during pregnancy and at the time of labour as well as 6 weeks treatment for the infant, while not breastfeeding would reduce Mother to Child transmission by two thirds (World Health Organisation, 1998).

In view of this evidence, the Ministry of Health (MoH) in 1998 formed the MTCT working group to spearhead and coordinate activities related to prevention of MTCT (MoH, 1999). The group was later referred to as Prevention of Mother to Child Transmission (PMTCT) working group. Since then PMTCT programmes have been supported by MoH and strategic plans have been developed to scale up the implementation of these programmes.

In 2002, Zambia had 83 PMTCT sites (National AIDS Council, 2004). Chipata district has six (6) PMTCT sites. Five (5) of these sites are in health centres while one (1) is at a health post. The health centres with PMTCT sites are Kapata, Namuseche and Chipata in the urban area, while Mwami, Chiparamba and Makwe health post are in the peri-urban area. Among the PMTCT sites the furthest is Chiparamba approximately 26km from the district office and the nearest is Chipata about 2km from the district office.

Chipata district is located in the Eastern province of Zambia. The district borders with Lundazi district in the north, Katete district in the west, Chadiza district in the South and Mambwe in the northwest. It also shares an international

boundary with the Republic of Malawi in the east. The district covers a wide area, with a total surface of about 6,112 sq km (Chipata District Health Office, 2006). The largest area of the district is a plateau while the rest of the area is surrounded by a range of hills.

The district is surrounded by a good network of electricity and telephone facilities. This makes it possible for the district to communicate within and outside the district. The main forms of communication within the district are radios and telephones. There is also a good network of both tarmac and gravel roads. The population of Chipata district is 444,262 of which 70% live in the rural areas and 30% live in the urban areas (Chipata District Health Office, 2006).

Table 1 indicates population projections of different categories as from January 2002 to December 2006.

Table 1 Population Projections of Different Categories from 2002 to 2006

CATEGORY	%	2002	2003	2004	2005	2006
Children 0-11 months	4	16,156	16,681	17,770	18,348	-
Children less than 5 years	20	80,779	83,403	88,852	91,740	94,736
Children 5-14 years	31.2	126,015	130,108	138,610	143,114	147,789
Women 15-45 Years	22	88,856	91,743	97,738	100,914	104,209
All adults 15 years +	51.2	206,793	213,511	227,462	234,854	242,525
Total males(all ages)	49	197,906	204,337	217,688	224,763	232,104
Total females	51	205,987	212,677	226,574	233,937	241,578
Total population	100	403,893	417,014	444,262	458,700	473,682
Expected pregnancies	5.4	21,810	22,519	23,990	24,770	25,279
Expected deliveries	5.2	21,002	21,685	23,102	23,852	24,631

SOURCE: Chipata District Health Office (2006-2008)

The District Health Office in partnership with Centre for Infectious Diseases Research in Zambia (CIDRZ) coordinates PMTCT services. CIDRZ provides the necessary logistics for smooth running of the PMTCT programmes in the district. In providing PMTCT services the four (4) key strategies (Prongs) are used; which are: Prevention of primary infection, Prevention of unintended pregnancy in HIV infected women, Interventions aimed at the prevention of mother to child transmission and Care and Support of infected and families (MoH, 2004).

The major tribes in Chipata district are Ngoni and Chewa. These tribes have some cultural beliefs and norms, which may impede development and delivery of health services in the district. For instance the Ngoni people practice polygamy, which may have a negative bearing on PMTCT programmes. Furthermore, the cultural beliefs in the district most often affect women participation in decision making as well as male involvement and participation in PMTCT programmes.

Men play key roles in reproductive health issues as individuals, family members and community decision makers. Therefore reaching them is 'key' to making PMTCT more widely accepted and used. In the PMTCT activities and strategies outlined, men's involvement and participation is critical and therefore there is need for them to be motivated in all PMTCT programmes. Men can prevent primary HIV infection to women by practicing safe sex through condom use and also by being faithful to one uninfected faithful sexual partner. It is also important for men to know their HIV status.

Rouw (2002) reports that traditionally, in many low and middle income countries, men do not participate in Reproductive or Maternal and Child Health Care services with their partners. Zambia is no exception. The inadequate male involvement and participation has been cited as one of the reasons for poor programme uptake. Traditionally, ANC and postnatal care have been viewed as

tasks for a woman. From 27 June to 22 July 2002, the Global PMTCT E-list discussed the issue of Male Involvement - concerns and ways to overcome the obstacles, (Rouw, 2002).

1.2 STATEMENT OF THE PROBLEM

Men's involvement and participation in PMTCT should be the new focus for the programme as well as other reproductive health programmes because men are strong decision makers on reproductive health issues. Robey *et al* (1998), reports that men are accustomed to making reproductive health decisions even without the permission from their wives; for example, they will decide when to have sex, how to have it, how many children to have and how many wives to marry. At the community level men have an influence on cultural norms that guide individual and community behaviour, such as sexual cleansing and how information about HIV/AIDS is interpreted.

Nevertheless, despite the key roles males have, they have not participated fully in PMTCT programmes in Zambia and Chipata district is no exception. Data available shows that there is only 5% male involvement in Voluntary Counselling and Testing (VCT) programmes in the district.

Table 2 shows the ratios of male: female participation in VCT at Chipata VCT Centre from 2004 to 2005. The average male participation at the centre is also 5%.

Table 2: Male : Female participation in VCT at Chipata VCT Centre; 2004 4th quarter to 2005 4th quarter.

Year	2004	2005			
Quarters	4 th	1 st	2 nd	3 rd	4 th
Women	88	100	78	94	66
Males	5	5	3	7	4
Total	93	105	81	101	70
Males	5.4%	4.8%	3.7%	6.9%	5.7%
Women	94.6%	95.2%	96.3%	93.1%	94.3%

Source: (Chipata Health Centre PMTCT site, 2005)

The low male participation could be due to the fact that PMTCT is provided at the ANC under the banner of Maternal and Child Health (MCH) as opposed to the all inclusive Family Health. Men are therefore excluded by definition. If the Zambian programme is to have significant impact on childhood HIV infection and the increasing mortality trends, PMTCT services need to be scaled-up to all Maternal Child Health (MCH) services in the country (MoH, 2004).

When the women have received counselling on HIV/AIDS, too often still they prefer not to involve their male partners because of fear of their reactions. An informal study conducted in six (6) PMTCT sites in Chipata district revealed that there are women who do not inform their husbands about the HIV test results which are positive for fear of divorce, going on separation or worse still being beaten.

Furthermore in Kenya, the United Nations International Children Emergency Fund (UNICEF) Project conducted in 2002 (Osborne, 2002) reported that women explained that they were afraid of being tested for HIV because they would be sent away by their husbands or accuse them of immorality if their spouses got to know their status. Therefore, unless the problem of low male involvement and participation in PMTCT activities are systematically researched and factors established, the vision and goals of PMTCT will not be met.

1.3 RESEARCH QUESTION

Zambia's strives to meet the Millennium Development Goal (MDGs) Number 4; To Reduce Child Mortality and Number 5; To Improve Maternal Health by 2015 (Ministry of Finance and National Planning, 2006), its efforts will be in vain if males are not involved and do not participate in the PMTCT programme. There is need therefore, to explore the involvement and participation of men in PMTCT. With this background, the researcher wanted to answer this question:-

- To what extent are males involved and participating in PMTCT programmes in Chipata District?

1.4 FACTORS INFLUENCING MALE PARTICIPATION IN PMTCT

Several factors may influence male involvement and participation in Prevention of Mother to Child Transmission (PMTCT) of HIV/AIDS in Chipata District. These factors include:

1.1.1 Socio-cultural values and norms

- (a) Strong misconceptions about men's involvement and participation in reproductive health needs. The reproductive health role is seen as a woman's business in society.
- (b) Traditional beliefs
- (c) Poor communication between couples
- (d) Religious beliefs that conflict with men's involvement and participation in PMTCT such as, condom use in some churches.
- (e) Traditional masculine stereotypes which reinforce male superiority – "Macho concept".
- (f) Polygamy

1.1.2 Individual Related Factors

- (a) Poor understanding of PMTCT services offered in the community as this is seen as a service for women only.
- (b) Negative attitudes towards PMTCT and reproductive health services by some men
- (c) Lack of enthusiasm to share knowledge on the progress of pregnancy and the necessary care provided at the ANC among spouses.

1.1.3 Health Related Factors

- (a) Long waiting time at the health facilities
- (b) Negative attitudes and behaviour of staff at the health facilities towards men
- (c) Inadequate trained personnel in PMTCT and male reproductive health needs.
- (d) Lack of motivation among health service providers to encourage males to be involved and participate in PMTCT.
- (e) Lack of knowledge by health staff about men's expectations
- (f) Ineffective programme management and lack of team work
- (g) Inadequate follow up plans for health service providers
- (h) Poor location of health facilities

1.1.4 Policy Related factors

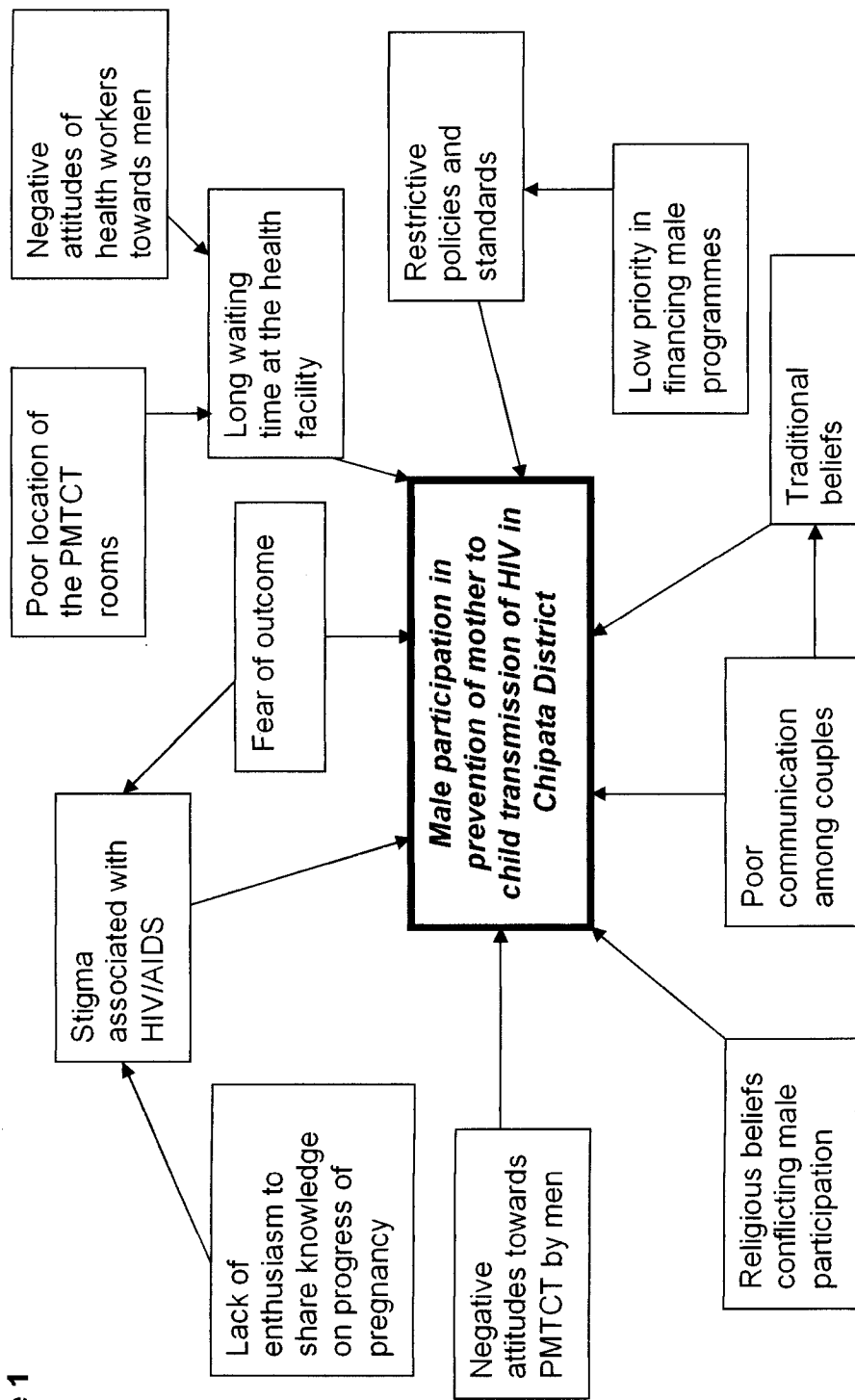
- (a) Low priority in financing communication programmes for men
- (b) Restrictive policies and standards of reproductive health services
- (c) The word "Father" is not included in the PMTCT programme's name.

1.1.5 Disease Related Factors

- (a) Stigma associated with HIV/AIDS
- (b) Fear of the outcome of HIV test

1.5 PROBLEM ANALYSIS

Figure 1



1.6 JUSTIFICATION

The purpose of this study was to determine factors that influence male involvement and participation in PMTCT programmes in Chipata district. Since men are powerful decision makers; their involvement and participation in PMTCT programmes will positively or negatively influence the utilisation of PMTCT services and also curb the spread of HIV.

As there was no operational research or any systematic study carried out on the implementation of PMTCT programme with regards to male involvement and participation in Zambia and in the district in particular, the study aimed providing information on how they can be involved effectively. Operations research is a process or a way of identifying and solving programme problems (Fisher and Foreit, 2002). The study will also provide a foundation for further studies regarding PMTCT and male participation in reproductive health programmes in Zambia.

Finally, the information gathered could be used by MoH and Non-Governmental Organizations (NGOs) involved in provision of PMTCT services in Chipata district, Zambia and the region at large to formulate policies that will open an avenue for males to be involved and participate in PMTCT programmes.

1.7 RESEARCH OBJECTIVES

1.1.6 General Objective

To determine factors that influence male involvement and participation in PMTCT programmes in Chipata district.

1.1.7 Specific Objectives

- (a) To identify the ratio of male involvement and participation in PMTCT in Chipata District in comparison to their female counterparts.

- (b) To assess the attitude and knowledge on PMTCT among men in Chipata District.
- (c) To assess current PMTCT practices and guidelines in relation to male involvement and participation in Chipata District.
- (d) To identify the socio-cultural factors that may influence male involvement and participation in PMTCT in Chipata District.

1.8 HYPOTHESES

- (a) Inadequate knowledge on PMTCT leads to low male involvement and participation in PMTCT programmes.
- (b) Certain Socio-cultural norms have a direct influence on male involvement and participation in PMTCT programmes.
- (c) Provision of PMTCT services from the ANC leads to low male involvement and participation in PMTCT programmes.

1.9 OPERATIONAL DEFINITIONS OF TERMS

- (a) **AIDS:** A chronic syndrome of opportunistic diseases which are a result of acquired immunodeficiency following infection with HIV.
- (b) **Attitude:** The respondent's way of perceiving PMTCT.
- (c) **Beliefs:** Specific statements that people define to be true.
- (d) **Counselling:** A form of intervention under the direction of someone with appropriate training which enables an individual, family or community to take responsibility for prevention of HIV/AIDS.
- (e) **Cultural Norms:** Rules and expectations by which a traditional society guides the behaviour of its members.
- (f) **HIV:** The virus that causes AIDS by destroying the biological ability of the human body to fight opportunistic infections such as tuberculosis..
- (g) **Knowledge:** Level of understanding or awareness of PMTCT.
- (h) **Male involvement:** Inclusion of men in PMTCT programmes.
- (i) **Male participation:** Men taking part in PMTCT programmes.

- (j) **Partner:** A person of the opposite sex with whom one has sexual relationships.
- (k) **PMTCT:** A programme designed to prevent mother to child transmission of HIV/AIDS.
- (l) **Prevention:** Taking precautionary measures to avoid infection.

1.10 VARIABLES AND CUT OFF POINTS

Table 4 Variables and cut-off points

No.	Variable	Indicator	Cut off points
Independent			
1	Knowledge	High Moderate Low	<ul style="list-style-type: none"> Men know all key issues about HIV/AIDS and PMTCT Men know most of key issues about HIV/AIDS and PMTCT Men know little of key issues about HIV/AIDS and PMTCT
2	Communication	Good Fair	<ul style="list-style-type: none"> Information always available Information not always given
3	Attitude	Positive Negative	<ul style="list-style-type: none"> Men interested to get involved participate in PMTCT programmes. Men view PMTCT as a woman's programme.
4	Practice	Good Poor	<ul style="list-style-type: none"> Use safe practices to prevent HIV transmission Use risky traditional practices
Dependant			
5	Involvement and participation	Good Poor	<ul style="list-style-type: none"> Males involved and participating Males not involved and participating

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Literature review is a critical summary of research on a topic of interest, often prepared to put a research problem in context or as the basis for an implementation project (Polit and Hungler, 1997). This review focuses on previous studies conducted to determine male involvement and participation in PMTCT programmes.

2.2 GLOBAL PERSPECTIVE

The HIV/AIDS epidemic has become a global problem. The 2004 UNAIDS reports that, at the end of 2003, 16.5% adults aged between 15–49 years were infected with HIV, out of which the higher percentage were women.

Formal and informal surveys around the world on reproductive health are increasingly focusing on male involvement in reproductive health programmes. Focus group discussions have also concentrated at looking at the male participation and involvement in reproductive health programmes. They look at males' attitudes towards reproductive health and sexual behaviours. This increase in the surveys reflects the widening recognition of men's importance in sexual and reproductive health. During the 14th International conference on AIDS held in Barcelona, on 9th of July 2002 attended by about 300 participants (Osborne, 2002), it was discovered that although "male" involvement was still very low, more males were getting involved in PMTCT related reproductive health issues than ever before and, were making a difference to program uptake.

In a research that was conducted in Cambodia by Walston (2005), it was revealed that only a few indicators for male involvement in PMTCT programmes

were developed. The Cambodian's Ministry of Health's National Maternal and Child Health Centre (NMCHC) therefore established A Safe Motherhood Initiative that promoted the involvement of men as participants in antenatal and postnatal care. The NMCHC's program for PMTCT found much higher female continuation when husbands are involved than when they were not (Walston, 2005).

2.3 REGIONAL PERSPECTIVE

The HIV/AIDS epidemic has its greatest impact in Sub-Saharan Africa, where a disproportionate number of all HIV/AIDS infections occur. HIV prevalence is now as high as 40% among antenatal care attendees in some parts of Africa and AIDS-related maternal deaths have increased dramatically and have recently begun to outpace the already alarming number of deaths from obstetric causes, (Moore, 2003). The high prevalence of maternal mortality related to HIV among women in African indicates the need for programs that involve their spouses.

A study conducted in Soweto – South Africa in 2004 by Garson (2005), revealed that women were failing to disclose their HIV status to partners and families fearing rejection and isolation. This can negatively affect the breast feeding alternative as the woman will be living in secrecy.

2.4 NATIONAL PERSPECTIVE

HIV /AIDS has left an estimated 620,000 orphans, 6% of these are on the street and 1% in orphanages (National AIDS Council, 2004). A PMTCT pilot program covering six sites was launched in Zambia in 1998, and by the end of 2002 extended to 64 sites. Currently PMTCT is offered as an integral part of Maternal and Child Health services in 83 sites across the country (National AIDS Council, 2004). The health centre personnel at each of the PMTCT designated sites have been involved in community sensitization.

A study conducted in Chililabombwe on reproductive health in 1998 revealed that reproductive health issues were traditionally a woman's business hence men were left out (Chela, 1998).

The Medical Women's Association of Zambia hosted a regional congress of the Near East and Africa region from the 29th June to 3rd July 2006 in Lusaka, under the theme "The Impact of HIV/AIDS on the Attainment of the Millennium Development Goals". The Congress among other issues discussed the social and cultural impact of HIV/AIDS with reference to male involvement and PMTCT strategies (Medical Women Association of Zambia, 2006). This is a clear indication that there is need to provide more information on this essential programme for its smooth implementation.

2.5 CONCLUSION

Literature available and the studies that have been done are on male participation in reproductive health in general and family planning in particular. Male involvement in PMTCT is the key to effective implementation of the programme in order to meet the MDGs; To Reduce Child Mortality and To Improve Maternal Health by 2015. Therefore this study concentrated much on male involvement and participation in PMTCT programmes.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter presents the research methodology that was used in this study. It focuses on research design, study setting, study population, sample selection, sample size, data collection tools, data collection technique, pilot study, validity and reliability, ethical and cultural considerations, plan for data analysis, plan for dissemination of findings and limitations of the study.

3.2 RESEARCH DESIGN

A research design is a plan or strategy for conducting a study. Uys and Basson (2000), define research design as the total strategy for the study, from identification of the problem to the final plans for collecting data, or as the structural framework within which the study is to be implemented.

A non experimental qualitative research (Treece & Treece, 1986) using the exploratory study design (Uys and Basson, 2000) was used for this study. Qualitative data are narrative descriptions obtained by interviewing subjects by making detailed notes of how subjects behave in naturalistic settings (Polit and Hungler, 1997). This study design enabled the researcher gain insight and understanding of the factors influencing male involvement and participation in PMTCT.

3.3 RESEARCH SETTING

Research setting is the physical location and conditions in which data collection takes place in a study (Polit and Hungler, 1997). The study was conducted in Chipata district at three PMTCT sites namely Chiparamba rural health centre, Kapata urban health centre and Chipata urban health centre.

- **Chiparamba Health Centre**

Chiparamba rural health centre was opened in 1952 and it is 26km from the main post office. It is located in the rural area, west of Chipata district, (Chiparamba Health centre, 2006). The centre has seven (7) Neighbourhood Health Committees. It offers curative, supportive, preventive, laboratory and referral services. According to the Action Plan (2006) for the health centre, the centre has a catchment population of 12, 199 and the expected number of pregnancies of 659. It serves fifty-five (55) villages for two (2) chiefs; Chief Chikuwe for the Chewa people and Chief Mishoro for the Ngoni people.

The majority of the people in the catchment area are peasant farmers while a few are subsistence farmers. Being in the rural area several traditional practices are being practiced such as Chokolo sexual cleansing (Chiparamba Health Centre, 2006). The main tribes in the area are Chewa and Ngoni.

- **Chipata Health Centre**

Chipata urban health centre is situated within the premises of Chipata General Hospital. It is in a low residential area. It is about 1.5 km from the main post office (Chipata Health Centre, 2005). The clinic was established in 1999 and offers services to approximately 25, 740 population (Chipata Health Centre, 2005) from both low and high residential areas. The expected number of pregnancies was 1, 390, (Chipata Health Centre, 2005).

The health centre offers curative, supportive, preventive and referral services. The clinic offers services to the following catchment areas; Kalongwezi, Kanjala, Mchini, St Monica's, Maferendum and Chipata Motel. Majority of the clients are small businessmen with "Tuntemba" and others are civil servants in government offices. Some of the clients are farmers. The catchment is composed of various tribes though the main tribes are Ngoni, Chewa, and Tumbuka

The health centres were selected using random sampling. Initially all the six PMTCT sites in the district were put in two clusters; that is sites in the rural and sites in the urban area. A cluster sample was obtained thereafter. A cluster sample is a type of sample that uses multiple stages and is often used to cover wide geographical areas in which aggregated units are randomly selected and then samples are drawn from the sample aggregated units, or clusters (Neuman, 2006). The rural cluster comprised Mwami Adventist Hospital, Chiparamba rural health centre and Makwe rural health post and the urban cluster comprised of Chipata health centre, Kapata urban health centre and Namuseche health centre.

Using simple random sampling method, one site was selected from the rural cluster while two sites were selected from the urban cluster. Random sampling method is a method sample in which the researcher uses a random number table or similar mathematical random process so that each sampling element in the population will have an equal probability of being selected, (Neuman, 2006). The sample sites were therefore obtained by choosing elementary units through a raffle draw.

3.6 SAMPLE SIZE

Uys and Basson, (2000) defines sample size as the total number of subjects/objects to represent the population under study. More technical considerations suggest that the required sample size is a function of the precision of the estimates one wishes to achieve, the variability or variance, one expects to find in the population and the statistical level of confidence one wishes to use (Mugo, 2004). Due to limited time and financial constraints, a total of 39 married men and 11 pregnant women comprised the sample size.

3.7 DATA COLLECTION TOOLS

A data collection tool is a device that is used to collect data (Polit and Hungler, 1997). Data collection was done between September and October 2006 in Chipata district. Data was collected using four (4) FGDs; that is one (1) with 11 pregnant women and three (3) with thirty nine (39) married men; thirteen (13) participants in each FGD.

The researcher was the moderator. A FGD guide was used to direct the discussions. Radio cassette recorder and note pad were used to record and take note of all the points raised during the FGDs. Each FGD lasted about 60 minutes.

3.8 DATA COLLECTION TECHNIQUES

Polit and Hungler (1997) define data collection technique as "a procedure of collection of data needed to address a research problem". At the beginning of each FGD, the moderator introduced himself, and then the participants also introduced themselves.

An explanation of the purpose of the study in simple terms was made; this enabled the respondents participate with ease during the discussions. The participants were oriented to the data collection tools and assured them that confidentiality was going to be maintained. During the discussions tape recording and note taking were done.

3.9 PILOT STUDY

A pilot study is a small study or trial run, done in preparation for the major study (Polit and Hungler, 1997). The pilot study was done in the 4th week of August 2006 at Lunkwakwa health centre in Chipata district. Seven (7) participants participated in the pilot study. The pilot study findings were used to make changes to the methodology.

3.10 VALIDITY AND RELIABILITY

Uys and Basson, (2000) define validity as "the degree to which an instrument measures what it is supposed to measure. It constitutes both internal and external validity".

External validity is the extent to which the findings of the research can be generalized to a larger population or to a different social, economical and political setting (Uys and Basson, 2000). To ensure external validity the sample size comprised people from different social, economic, political and religious backgrounds. Internal validity refers to interpretation of the findings within the study or data collected (Uys and Basson, 2000). It seeks to find out if the effect on the dependent variable observed was actually due to the action of the independent variable. This was ensured through the use of a scientific and statistics calculator and HPSS for analysis.

Reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Uys and Basson, 2000). This was ensured by use of the FDG guide whose questions were verified by two independent people.

3.11 ETHICAL AND CULTURAL CONSIDERATIONS

The development and implementation of research should be ethically and culturally acceptable. Ethics is defined as a system of moral values that is concerned with the degree to which research procedure adhere to professional, legal and social obligations to the study participants (Polit and Hungler, 1997). Uys and Basson (2000), further states that the ethical acceptability of the research should apply first to the people directly involved in it, and then to the people involved in carrying out the research.

It is important to consider ethics in research to ensure the protection of human rights. The researcher got permission to carry out the study from; the Permanent Secretary (P.S.) at the MoH; Provincial Medical Officer (P.M.O.) Eastern Province; District Medical Officer (D.M.O.) from Chipata District Health Office; Health Centre In-charges and Research participants. The nature and purpose of the study was explained to the respondents before discussions. The participants were assured of privacy that the information would only be used for the research and the names would not be communicated to any one.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The purpose of this chapter is to present information on how the research data were analysed and what information was obtained.

4.2 DATA ANALYSIS

Data analysis is the systematic organisation and synthesis of research data, and the testing of research hypotheses using those data (Polit and Hungler, 1997). Content analysis (Polit and Hungler, 1997), which is a technique for gathering and analysing the content of text, was used to analyse the data.

The researcher began the analysis by reading the entire script while playing back the tape. The tape recording on average for each FDG was 60 minutes. Listening to the recordings several times enabled the researcher to organize the raw data into conceptual categories and create themes or concepts (Neuman, 2006). The concepts were broken down and arranged into a machine readable form of data for statistical analysis. The core categories and sub themes were then entered on the data master sheet manually.

Coding of data into a machine readable format was through open coding (Neuman, 2006), to condense the mass of data into categories. The codes were used to enter data in computer software SPSS 9.0 for windows to draw frequency tables, pie charts and bar charts. Data were also analysed using a SHARP scientific and statistical calculator. The researcher found these as appropriate to present the findings because they were easy to interpret. They were also useful in making cross tabulations and inferences.

The analysis of the data from the two categories (men & women) was done separately. The core categories for the men were; demographic data, knowledge, attitude, communication and participation, while for the women were; demographic data, knowledge, communication and practice.

4.3 PRESENTATION OF FINDINGS

Presentation of data is done in two folds; data from FGDs with males aged between 20 to 45 years and data from FGD with pregnant mothers. Data is presented in frequency tables, graphs and pie charts. Cross tabulations of the variables used has also been done to identify relationships among variables.

4.3.1 MALES AGED BETWEEN 20 AND 45 YEARS

A. DEMOGRAPHIC DATA

Table 5, Participants' age distribution

(n=39)

Age	Frequency	Percentage
20-24 years	4	10.3
25-29 years	5	12.8
30-34 years	12	30.8
35-39 years	7	17.9
40-44 years	9	23.1
45 years+	2	5.1
Total	39	100.0

Twelve (30.8%) of the participants were in the age group of 30-34 years, 9 (23.1%) were between 40-44 years, 5 (12.8%) were between 25-29 years, 4 (10.3%) were between 20-24 years while 2 (5.1%) were above 45 years old. Seven (17.9%) were aged between 35-39 years.

Table 6, Participants' number of wives

(n=39)

No. of Wives	Frequency	Percent
1	35	89.7
2	4	10.3
Total	39	100.0

The majority of the participants, 35 (89.7%) had one wife while 4 (10.3%) had two wives each.

Table 7, Participants' number of Children

(n=39)

No. of Children	Frequency	Percent
0-2	16	41.0
3-5	15	38.5
6-8	8	20.5
Total	39	100.0

Sixteen (41%) of the participants had number of children ranging between 0-2, while 15 (38.5%) had number of children ranging between 3-5 and 8 (20.5%) had number of children ranging 6-8.

Table 8, Participants' Tribe**(n=39)**

Tribe	Frequency	Percent
Tumbuka	8	20.5
Ngoni	13	33.3
Chewa	16	41.0
Bisa	1	2.6
Bemba	1	2.6
Total	39	100.0

Sixteen (41%) of the participants belonged to the Chewa tribe, Ngoni tribe had 13 (33.3%), Tumbuka tribe had 8 (20.5%) participants while Bisa and Bemba tribes had 1 (2.6%) participant each.

Table 9, Participants' residential area**(n=39)**

Residential Area	Frequency	Percent
High Density	19	48.7
Low Density	4	10.3
Village	16	41.0
Total	39	100.0

Nineteen (48.7%) of the participants were from high density areas, 16 (41%) participants were residing in villages while 4 (10.3%) were from low density areas.

Table 10, Participants' education Level**(n=39)**

Educational Level	Frequency	Percent
None	1	2.6
Primary	19	48.7
Junior Secondary	6	15.4
Senior Secondary	11	28.2
College	1	2.6
University	1	2.6
Total	39	100.0

Nineteen (48.7%) of the participants attained primary school education, 11 (28.2%) had senior secondary education level and 6 (15.4%) had junior secondary education level while 1 (2.6%) attained college and university education each. Another 1 (2.6%) had no education at all.

Table 11, Participants' occupation**(n=39)**

Occupation	Frequency	Percent
Farmer	19	48.7
Accountant	1	2.6
Clerk	6	15.4
Security Guard	2	5.1
Machine Attendant	1	2.6
Classified daily Employee	2	5.1
Traditional Healer	2	5.1
Businessman	6	15.4
Total	39	100.0

Nineteen (48.7%) of the participants were farmers, 6 (15.4%) were clerks and the other 6 (15.4%) were businessmen, 2 (5.1%) were security guards, 2 (5.1%) were classified daily employees and the other 2 (5.1%) were traditional healers while 1 (2.6%) was an accountant and 1 (2.6%) was a machine attendant.

Table 12, Participants' denomination

(n=39)

Denomination	Frequency	Percent
Reformed Church in Zambia	10	25.6
Roman Catholic Church	18	46.2
Reformed Christian Church of God	1	2.6
Pentecostal Good News Church	1	2.6
Baptist	2	5.1
Pentecostal Prince of Life	1	2.6
Anglican Church	1	2.6
Zionist	2	5.1
Seventh-Day Adventist	3	7.7
Total	39	100.0

Eighteen (46.2%) of the participants belonged to the Roman Catholic Church (RCC), 10 (25.6%) belonged to the Reformed Church in Zambia (RCZ), 3 (7.7%) belonged to the Seventh-day Adventist Church (SDA) and 2 (5.1%) belonged to the Baptist and Zionist Churches each. The least number of the participants' denominations were Reformed Christian Church of God (RCCG), Pentecostal Good News Church (PGNC), Pentecostal Prince of Life (PPL) and Anglican Churches at 1 (2.6%) each.

B. KNOWLEDGE

Table 13, Participants' response on definition of HIV

(n=39)

Definition of HIV	Frequency	Percent
Virus	21	53.8
Disease	18	46.2
Total	39	100.0

Eighteen (46%) of the participants defined HIV as a disease while 21 (53.8%) defined HIV as a virus.

Table 14, Participants' response on definition of AIDS

(n=39)

Definition of AIDS	Frequency	Percent
Disease	39	100.0

All the 39 (100%) participants defined AIDS as a disease.

Table 15, Participants' response on knowledge regarding the modes of HIV transmission

(n=39)

Modes of HIV Transmission	Frequency	Percent
MTCT, blood transfusion, unprotected sex & use of contaminated sharps	1	2.6
MTCT, blood transfusion, unprotected	2	5.1
Unprotected sex & use of contaminated sharps	19	48.7
Unprotected sex	15	38.5
Unprotected sex, use of contaminated sharps & sharing toothbrush	1	2.6
Unprotected sex, use of contaminated sharps & contamination in an RTA	1	2.6
Total	39	100.0

Nineteen (48.7%) of the participants indicated that the modes of HIV transmission were unprotected sex & use of contaminated sharps. One (2.6%) of the participants indicated that it was through MTCT, blood transfusion, unprotected sex & use of contaminated sharps, another 1 (2.6%) indicated unprotected sex, use of contaminated sharps & sharing toothbrushes while a further 1 (2.6%) indicated unprotected sex, use of contaminated sharps & contamination in an RTA as modes of transmission. Fifteen (38.5%) indicated unprotected sex.

Table 16, Participants' response regarding where HIV is found in the body **(n=39)**

Components where HIV is found in the body	Frequency	Percent
Blood, semen, milk & vaginal fluids	3	7.7
Blood, semen & milk	1	2.6
Blood, semen & vaginal fluids	1	2.6
Blood & vaginal fluids	1	2.6
Blood & semen	1	2.6
Blood & milk	13	33.3
Blood	19	48.7
Total	39	100.0

Nineteen (48.7%) of the participants indicated that HIV is found in Blood, 13 (33.3%) indicated blood & milk and 3 (7.7%) indicated blood, semen, milk & vaginal fluids. One (2.6%) indicated blood, milk and semen, 1 (2.6%) indicated blood, semen and vaginal fluids, 1 (2.6%) indicated blood and vaginal fluids another 1 (2.6%) indicated blood and milk.

Table 17, Participants' response on knowledge regarding MTCT of HIV **(n=39)**

MTCT of HIV	Frequency	Percent
During pregnancy, delivery & breastfeeding	2	5.1
During delivery & breastfeeding	7	17.9
During Pregnancy and breast feeding	6	15.4
During pregnancy	13	33.3
During delivery	2	5.1
During breast feeding	8	20.5
Not sure	1	2.6
Total	39	100.0

Thirteen (33.3%) of the participants indicated that MTCT of HIV is during pregnancy, 8 (20.5%) indicated during breast feeding, 7 (17.9%) indicated during delivery & breastfeeding, 6 (15.34% indicated during pregnancy and breast feeding, 2 (5.1%) indicated during pregnancy, delivery & breastfeeding, another 2 (5.1%) indicated during delivery while 1 (2.6%) was not sure.

Table 18, Participants' response on knowledge of HIV prevention

(n=39)

HIV prevention	Frequency	Percent
Abstinence & being faithful to one faithful sexual partner	3	7.7
Abstinence & condom use	10	25.6
Being faithful to one faithful sexual partner & condom use	1	2.6
Abstinence, condom use, no sharing of sharps	2	5.1
Abstinence, condom use & screening of blood	2	5.1
Abstinence & no sharing of sharps	7	17.9
Being faithful to one faithful sexual partner & no sharing of sharps	1	2.6
Condom use & screening of blood	1	2.6
No sharing of sharps	1	2.6
Abstinence	7	17.9
Being faithful to one faithful sexual partner	1	2.6
Abstinence & screening of blood	1	2.6
Condom use	2	5.1
Total	39	100.0

Ten (25.6%) of the participants indicated that HIV prevention is through abstinence and condom use, 7 (17.9%) indicated abstinence & no sharing of sharps, another 7 (17.9%) indicated abstinence, 3 (7.7%) indicated abstinence & being faithful to one faithful sexual partner, 2 (5.1%) indicated abstinence, condom use, no sharing of sharps, another 2 (5.1%) indicated abstinence,

condom use & screening of blood, while a further 2 (5.1%) indicated condom use. Others; 1 (2.6%) indicated being faithful to one faithful sexual partner & condom use, 1 (2.6%) indicated being faithful to one faithful sexual partner & no sharing of sharps, 1 (2.6%) indicated condom use & screening of blood, 1 (2.6%) indicated no sharing of sharps, 1 (2.6%) indicated being faithful to one faithful sexual partner and 1 (2.6%) indicated abstinence & screening of blood.

C. COMMUNICATION

Table 19, Participants' response on source of information

(n=39)

Source of Information about PMTCT	Frequency	Percent
Wife	12	30.8
Media	12	30.8
Health Centre	1	2.6
None	14	35.9
Total	39	100.0

Fourteen (35.9%) of the participants indicated that they have never heard of PMTCT, 12 (30.8%) heard about the programme from their wives, while another 12 (30.8%) heard from the media and 1 (2.6%) heard about PMTCT from the health centre.

Table 20, Participants' response on knowledge about PMTCT programme

(n=39)

Information on PMTCT programme	Frequency	Percent
IEC, counselling & ARVs	4	10.3
IEC & ARVs	1	2.6
IEC & counselling	6	15.4
ARVs & counselling	1	2.6
IEC	3	7.7
Do not know	24	61.5
Total	39	100.0

Twenty four (61.5%) of the participants indicated that they did not know what PMTCT programme was all about, 6 (15.4%) indicated that it was about IEC & counselling, 4 (10.3%) indicated that it was about IEC, counselling & ARVs, 3 (7.7%) indicated it was about IEC only, while 1 (2.6%) indicated that it was about IEC & ARVs and another 1(2.6%) indicated it was about ARVs & counselling.

D. ATTITUDE

Table 21, Participants' view towards males attending antenatal care sessions with their wives

(n=39)

Views towards males attending antenatal care sessions with their wives	Frequency	Percent
It is for women & men are busy	2	5.1
Men busy, but can attend	10	25.6
Never thought of it	5	12.8
It is for women, men can not attend	17	43.6
Only escorted, but not attended sessions	5	12.8
Total	39	100.0

Seventeen (43.6%) of the participants indicated that ANC was a programme for women and men can not attend, 10 (25.6%) indicated that men are busy, but can attend, 5 (12.8%) indicated that they only escorted, but not attended sessions and while 2 (5.1%) added that men are too busy to attend ANC. Five (12.8%) indicated that they never thought of it that men could attend.

Table 22, Participants' view on males' role in PMTCT**(n=39)**

Views on roles of men in PMTCT	Frequency	Percent
Encouraging	5	12.8
Supporting & HIV testing	4	10.3
Supporting	6	15.4
HIV testing	11	28.2
Behaviour change	11	28.2
Do not know	2	5.1
Total	39	100.0

Eleven (28.2%) of the participants indicated HIV testing as a role for males in PMTCT and the other 11 (28.2%) indicated behaviour change as a role for males in PMTCT. Six (15.4%) indicated that men can take the supportive role, 5 (12.8%) indicated that men can take the role of encouraging women, 4 (10.3%) indicated that men can take a supportive role and HIV testing. Only 2 (5.1%) they indicated that they did not know the roles men could take in PMTCT programmes.

Table 23, Participants' view on male involvement and participation in PMTCT**(n=39)**

Male involvement and participation	Frequency	Percent
Men are left out in the programme	16	41.0
Programme is focused on women	7	17.9
Men should be invited invitation letters	16	41.0
Total	39	100.0

Sixteen (41%) participants indicated that men are left out in PMTCT programmes and another 16 (41%) indicated that males should be invited using invitation letters while 7 (17.9%) indicated that the programme is focused on women.

E. PRACTICE

Table 24, Traditional practices that may promote HIV transmission from the parents to the baby

(n=39)

Traditional practices	Frequency	Percent
Smearing semen (Kukonza Mwana)	29	74.4
Smearing semen & tattooing	1	2.6
Tattooing	2	5.1
None	7	17.9
Total	39	100.0

Twenty nine (74.4%) of the participants indicated smearing of semen on the baby (Kukonza mwana) as a traditional practice that may promote HIV transmission from the parents to the baby, 7 (17.9%) were not certain of any risky traditional practice, 2 (5.1%) indicated tattooing of babies as risky practice while 1 (2.6%) indicated smearing semen & tattooing as risky practices.

Table 25, Participants' view on alternative safe traditional practices instead of use of semen smearing and use of tattoos

(n=39)

Safe traditional practices instead of semen smearing and use of tattoos	Frequency	Percent
Using herbs or chickens or young cousins	3	7.7
Using herbs or chickens	3	7.7
Using chickens or young cousins	4	10.3
Using herbs	10	25.6
Using herbs or young cousins	10	25.6
Not aware	9	23.1
Total	39	100.0

Ten (25.6%) participants indicated the use of herbs as a safe traditional practice in place of semen smearing and use of tattoos and another 10 (25.6%) participants indicated use of herbs or young cousins as safe traditional practices in place of semen smearing and use of tattoos, while 9 (23.1%) said they were not aware of alternative safe traditional practices in place of semen smearing and use of tattoos. Four (36.4%) indicated use of chickens or young cousins as safe traditional practices in place of semen smearing and use of tattoos, 3 (7.7%) indicated use of herbs or chickens or young cousins as safe traditional practices in place of semen smearing and use of tattoos and other 3 (7.7%) indicated the use of herbs or chickens as safe traditional practices in place of semen smearing and use of tattoos.

4.3.2 FEMALES IN EITHER 2ND AND 3RD TRIMESTER

A. DEMOGRAPHIC DATA

Table 26, Participants' age distribution

(n=11)

Age	Frequency	Percent
20-24 years	5	45.5
25-29 years	3	27.3
30-34 years	1	9.1
35-39 years	2	18.2
Total	11	100.0

Four (36.9%) of the participants were in the age range of 20-24 years, 3 (27.3%) were between 25-29 years, 2 (18.2%) were between 35-39 years, 1 (9.1%) was between 30-34 years while another 1 (9.1%) was below 20 years.

Table 27, Participants' Residential area

(n=11)

Residential Area	Frequency	Percent
High Density	8	72.7
Low density	3	27.3
Total	11	100.0

The majority of the participants 8 (72.7%), were from high density residential areas while 3 (27.3%) were from low density areas.

Table 28, Participants' Educational level**(n=11)**

Education level	Frequency	Percent
Primary	4	36.4
Junior Secondary	6	54.5
College	1	9.1
Total	11	100.0

Six (54.5%) of the participants had junior secondary school education and 1 (9.1%) had college education while 4 (36.4%) had primary education

Table 29, Participants' occupation**(n=11)**

Occupation	Frequency	Percent
Scholar	1	9.1
Marketer	4	36.4
Teacher	1	9.1
None	5	45.5
Total	11	100.0

Five (45.5%) of the participants had no occupation, 4 (36.4%) were marketers, 1 (9.1%) was a teacher and another 1 (9.1%) was a scholar.

Table 30, Participants' marital status**(n=11)**

Marital Status	Frequency	Percent
Married	10	90.9
Single	1	9.1
Total	11	100.0

One (9.1%) participant was single while the rest 10 (90.9%) were married.

Table 31, Participants' parity**(n=11)**

Parity	Frequency	Percent
0-2	7	63.6
3-5	2	18.2
6-8	2	18.2
Total	11	100.0

Seven (63.6%) of the participants had 0-2 children, 2 (18.2%) had 3-5 children while another 2 (18.2%) had 6-8 children.

Table 32, Participants' gestation age**(n=11)**

Gestation Age	Frequency	Percent
2 nd Trimester	5	45.5
3 rd Trimester	6	54.5
Total	11	100.0

Six (54.5%) of the participants were in their 3rd trimester while 5 (45.5%) were in their second trimester.

Table 33, Participants' tribe**(n=11)**

Tribe	Frequency	Percent
Chewa	5	45.5
Ngoni	2	18.2
Tumbuka	2	18.2
Nsenga	2	18.2
Total	11	100.0

Five (45.5%) of the participants belonged to the Chewa tribe, 2 (18.2%) were Ngoni, another 2 (18.2%) were Tumbuka while a further 2 (18.2%) were Nsenga.

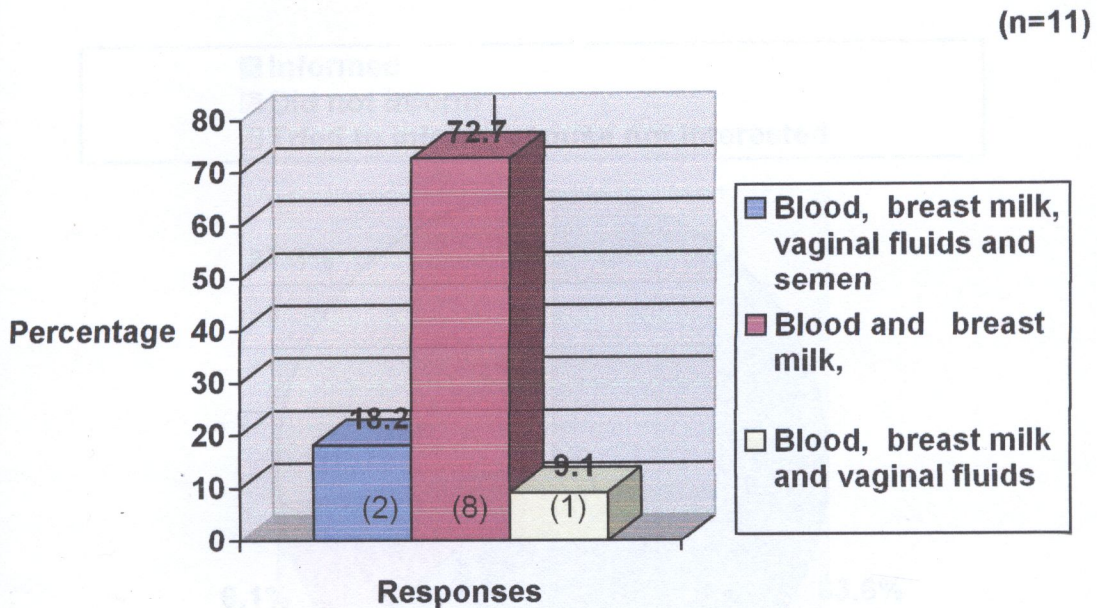
Table 34, Participants' denomination**(n=11)**

Denomination	Frequency	Percent
Roman Catholic Church (RCC)	5	45.5
Jehovah's' Witness	1	9.1
Reformed Church in Zambia (RCZ)	2	18.2
Pentecostal Assemblies of God (PAOG)	3	27.3
Total	11	100.0

Five (45.5%) of the participants belonged to the RCC, 3 (27.3%) belonged to PAOG, 2 (18.2%) belonged to RCZ and 1 (9.1%) was a Jehovah's Witness.

B. KNOWLEDGE

Figure 2, Participants' response on knowledge regarding where HIV is found in the body

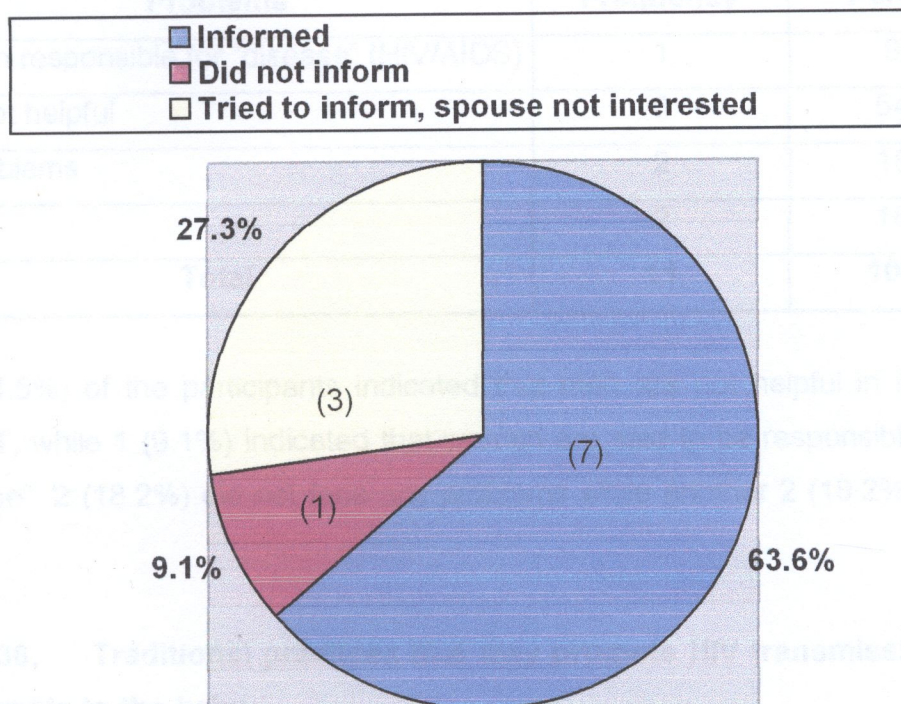


Eight (72.7%) of the participants indicated that HIV is found in blood and breast milk, while 2 (18.2%) indicated that it is found in blood, breast milk, vaginal fluids and semen and 1 (9.1%) indicated that it is found in blood, breast milk and vaginal fluids.

C. COMMUNICATION

Figure 3, Participants' response on communication of PMTCT programmes to spouse

(n=11)



Seven (63.6%) of the participants indicated that they informed their spouses about the PMTCT programme, 3 (27.3%) indicated that they tried to inform their spouses but the spouse were not interested, while 1 (9.1%) said they did not inform their spouses.

D. PRACTICE

Table 35, Participants' response on problems women face with spouses regarding the PMTCT programme

(n=11)

Problems	Frequency	Percent
Women responsible for "disease" (HIV/AIDS)	1	9.1
Men not helpful	6	54.5
No problems	2	18.2
None	2	18.2
Total	11	100.0

Six (54.5%) of the participants indicated that men are not helpful in issues of PMTCT, while 1 (9.1%) indicated that women are said to be responsible for the "disease". 2 (18.2%) did not face any problems while another 2 (18.2%) did not know.

Table 36, Traditional practices that may promote HIV transmission from the parents to the baby

(n=11)

Traditional practices	Frequency	Percent
Smearing semen on the baby	6	54.5
Tattooing the baby	5	45.5
Total	11	100.0

The majority of the participants 6 (54.5%) indicated that the traditional practice that may promote HIV transmission from the parents to the baby is smearing of semen on the baby. 5 (45.5%) indicated tattooing of the baby.

Table 37, Participants' view on alternative safe traditional practices instead of use of semen smearing and use of tattoos

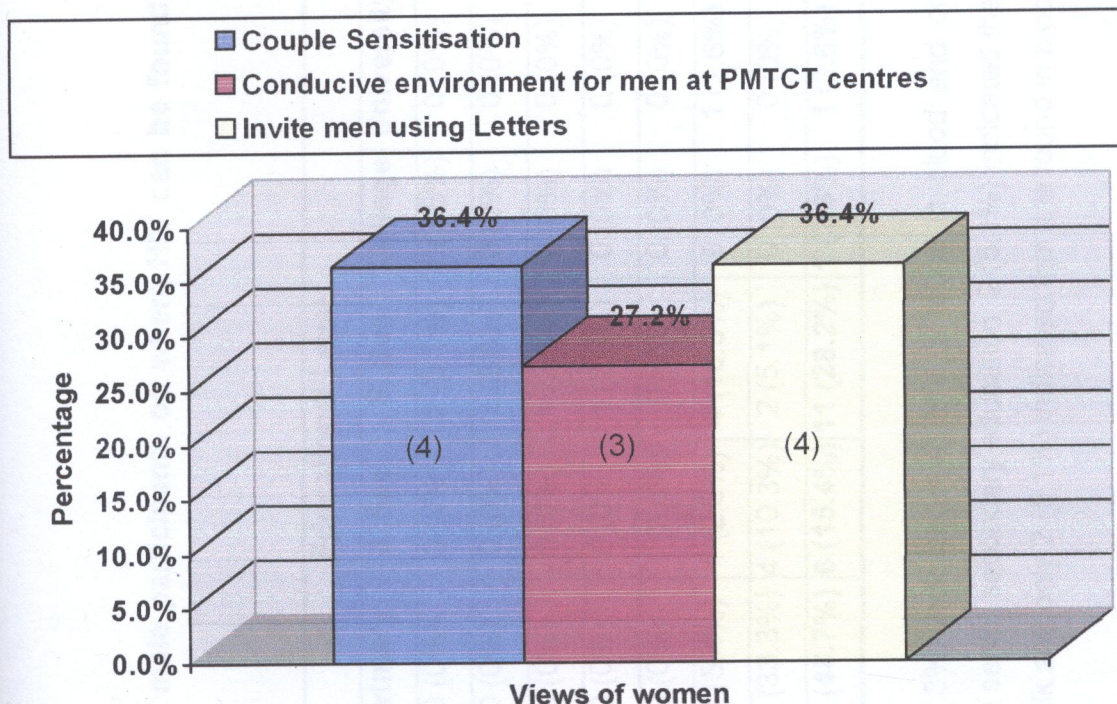
(n=11)

Safe traditional practices instead of semen smearing and use of tattoos	Frequency	Percent
Using herbs or chickens	2	18.1
Using herbs or young cousins	1	9.1
Using herbs	4	36.4
Not aware	4	36.4
Total	11	100.0

Four (36.4%) of the participants indicated use of herbs as a safe traditional practice, while another 4 (36.4%) indicated that they were not aware of any safe traditional practice. 2 (18.1%) indicated the use of herbs or chickens while 1 (9.1) indicated use of young cousins.

Figure 4, Women's views on how men can be involved in PMTCT programme

(n=11)



Four (36.4%) of the participants indicated that males could be involved in PMTCT through couple sensitisation and inviting men to attend PMTCT sessions, while another 4 (36.4%) indicated invitation of males using letters. 3 (27.2%) indicated provision of a conducive environment for males at the PMTCT centres.

4.3.3 CROSS TABULATIONS

A. KNOWLEDGE

Table 38, The relationship between knowledge of male participants on where HIV can be found in the body (table 16) and education level (table 10)

(n=39)

HIV in the body	Educational Level						Total
	None	Primary	J. Sec	S. Sec	College	University	
Blood, semen, milk & vaginal fluids	0 (0%)	0 (0%)	0 (0%)	2 (5.1%)	1 (2.6%)	0 (0%)	3 (7.7%)
Blood, semen & milk	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Blood, semen & vaginal fluids	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Blood & vaginal fluids	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Blood & semen	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)
Blood & milk	1 (2.6%)	6 (15.4%)	1 (2.6%)	4 (10.3%)	0 (0%)	1 (2.6%)	13 (33.3%)
Blood	0 (0%)	13 (33.3%)	4 (10.3%)	2 (5.1%)	0 (0%)	0 (0%)	19 (48.7%)
Total	1 (2.6%)	19 (48.7%)	6 (15.4%)	11 (28.2%)	1 (2.6%)	1 (2.6%)	39 (100%)

Among the participants with primary education 13 (33.3%) indicated that HIV is found in blood and only 6 (15.4%) indicated that it is found in blood and milk. For those with senior secondary education, 2 (5.1%) indicated that it is found in blood, 4 (10.3%) indicated that it is found in blood and milk and only 2 (5.1%) indicated that it is found in blood,

semen, milk & vaginal fluids, while 1 (2.60%) of the participant with college education indicated that it is found in blood, semen, milk & vaginal fluids.

Table 39, The relationship between knowledge of female participants on where HIV is found in the body (figure 4) and education level (table 28%)

(n=11)

HIV in the body	Educational level			Total
	Primary	J. Sec	College	
Blood, semen, milk & vaginal fluids	0 (0%)	1 (9.1%)	1 (9.1%)	2 (18.2%)
Blood & milk	3 (27.3%)	5 (45.5%)	0 (0%)	8 (72.7%)
Blood, milk & vaginal fluids	1 (9.1%)	0 (0%)	0 (0%)	1 (9.1%)
Total	4 (36.4%)	6 (54.5%)	1(9.1%)	11 (100%)

Among the female participants with junior secondary education, 5 (45.5%) indicated that HIV in the body is found in blood and milk, 1 (9.1%) indicated that it is found in blood, semen, milk & vaginal fluids and none indicated Blood, milk and vaginal fluids only. The only participant with college education 1 (9.1%) indicated that HIV is found in blood, semen, milk and vaginal fluids. Those with primary education 3 (27.3%) indicated blood and milk while 1 (9.1%) indicated blood, milk and vaginal fluids.

Table 40, The relationship between knowledge of male participants regarding MTCT of HIV (table 17) and education level (table 10) (n=39)

MTCT of HIV	Educational Level						Total
	None	Primary	J. Sec	S. Sec	College	University	
During pregnancy, delivery & breastfeeding	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	1 (2.6%)	2 (5.1%)
During delivery & breastfeeding	0 (0%)	1 (2.6%)	1 (2.6%)	5 (12.8%)	0 (0%)	0 (0%)	7 (17.9%)
During pregnancy & breast feeding	0 (0%)	3 (7.7%)	3 (7.7%)	0 (0%)	0 (0%)	0 (0%)	6 (15.4%)
During pregnancy	0 (0%)	10 (25.6%)	2 (5.1%)	1 (2.6%)	0 (0%)	0 (0%)	13 (33.3%)
During delivery	0 (0%)	2 (5.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (5.1%)
During breast feeding	1 (2.6%)	3 (7.7%)	0 (0%)	4 (10.3%)	0 (0%)	0 (0%)	8 (20.5%)
Not sure	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Total	1 (2.6%)	19 (48.7%)	6 (15.4%)	11 (28.2%)	1 (2.6%)	1 (2.6%)	39 (100%)

Among the participants with primary education, 10 (25.6%) indicated that MTCT of HIV is during pregnancy, 3 (7.7%) indicated during breast feeding, another 3 (7.7%) indicated during pregnancy and breast feeding, 2 (5.1%) indicated during delivery, 1 (2.6%) indicated during delivery and breastfeeding while none 0 (0%) indicated during pregnancy, delivery & breastfeeding and none 0 (0%) was not sure. Among the participants with senior secondary education 5 (12.8%) indicated during delivery & breastfeeding, 4 (10.3%) indicated during breast feeding, 1 (2.6%) indicated during pregnancy and 1 (2.6%) was not sure.

Table 41, The relationship between knowledge of male participants regarding knowledge on HIV prevention (table 18) and residential area (table 9)

(n=39)

HIV Prevention	Residential Area			Total
	H. density	L. density	Village	
Abstinence, Being faithful to one sexual partner	1 (2.6%)	0 (0%)	2 (5.1%)	3 (7.7%)
Abstinence, Condom use	4 (10.3%)	1 (2.6%)	5 (12.8%)	10 (25.6%)
Being faithful to one sexual partner, Condom use	0 (0%)	0 (0%)	1 (2.6%)	1 (2.6%)
Abstinence, Condom use, No sharing of sharps	1 (2.6%)	1 (2.6%)	0 (0%)	2 (5.1%)
Abstinence, Condom use, Blood screening	1 (2.6%)	1 (2.6%)	0 (0%)	2 (5.1%)
Abstinence, No sharing of sharps	6 (15.4%)	0 (0%)	1 (2.6%)	7 (17.9%)
Being faithful to one sexual partner, No sharing of sharps	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Condom use, Blood screening	0 (0%)	0 (0%)	1 (2.6%)	1 (2.6%)
No sharing of sharps	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Abstinence	3 (7.7%)	1 (2.6%)	3 (7.7%)	7 (17.9%)
Being faithful to one sexual partner	0 (0%)	0 (0%)	1 (2.6%)	1 (2.6%)
Abstinence, Blood screening	0 (0%)	0 (0%)	1 (2.6%)	1 (2.6%)
Condom use	1 (2.6%)	0 (0%)	1 (2.6%)	2 (5.1%)
Total	19 (48.7%)	4 (10.3%)	16 (41%)	39 (100%)

Among the participants from high-density areas, 6 (15.4%) indicated that HIV prevention is through abstinence and not sharing sharps, 4 (10.3%) indicated abstinence and condom use, 3 (7.7%) indicated abstinence, 1 (2.6%) indicated condom use, 1 (2.6%) indicated no sharing of sharps, 1 (2.6%) indicated being faithful to one faithful sexual partner and no sharing of sharps, 1 (2.6%) indicated abstinence, condom use and screening of blood and 1 (2.6%) indicated abstinence and being faithful to one faithful sexual partner.

5.0 COMMUNICATION

Table 42, The relationship between males who never heard of the term PMTCT and residential area

(n=14)

Source of information	Residential Area			Total
	High Density	Low Density	Village	
Never heard of PMTCT	6 (42.9%)	3 (21.4%)	5 (35.7%)	14 (100%)
Total	6 (42.9%)	3 (21.4%)	5 (35.7%)	14 (100.0%)

The male participants who indicated that they never heard of the term PMTCT, 6 (42.9%) were from high density residential area, 3 (21.4%) were from low density areas and 5 (35.7%) were from the villages.

Table 43, The relationship between males who did not know the activities in PMTCT programme and residential area

(n=24)

Information on activities in PMTCT Programme	Residential Area			Total
	High Density	Low Density	Village	
Do not know	8 (33.3%)	3 (12.5%)	13 (54.2%)	24 (100%)
Total	8 (33.3%)	3 (12.5%)	13 (54.2%)	24 (100.0%)

The male participants who indicated that they never heard of the term PMTCT, 8 (33.3%) were from high density residential area, 3 (12.5%) were from low density areas, while the majority, 13 (54.2%) were from the villages.

C ATTITUDE

Table 44, The relation between views towards males attending antenatal care sessions with their wives (table 21) and residential area (table 9)

(n=39)

Views on males attending ANC	Residential Area			Total
	High Density	Low Density	Village	
It is for women & men are busy to attend	2 (5.1%)	0 (0%)	0 (0%)	2 (5.1%)
Men busy, but can attend	8 (20.5%)	0 (0%)	2 (5.1%)	10 (25.6%)
Never thought of it	3 (7.7%)	1 (2.6%)	1 (2.6%)	5 (12.8%)
It is for women, men can not attend	5 (12.8%)	3 (7.7%)	9 (23.1%)	17 (43.6%)
Only escorted, but not attended sessions	1 (2.6%)	0 (0%)	4 (10.3%)	5 (12.8%)
Total	19 (48.7%)	4 (10.3%)	16 (41%)	39 (100%)

Among the participants from high density residential area, 8 (20.5%) indicated that men were busy, but can attend the sessions, 5 (12.8%) indicated that it was for women men can not attend, 3 (7.7%) said they never thought of it, 2 (5.1%) indicated that it is for women and that men were busy to attend while 1 (2.6%) said he only escorted, but did not attend the sessions. Among the participants from the village, 9 (23.1%) indicated that it was for women and men can not attend, 2 (5.1%) indicated that men were busy, but can attend the sessions and 1 (2.6%) indicated that he never thought of it. Four (10.3%) indicated that men can only escort but not attend the sessions.

Table 45, The relation between views towards males attending antenatal care sessions with their wives (table 21) and educational level (table 10)

(n=39)

Views towards males attending ANC sessions	Educational Level						Total
	None	Primary	Junior Sec	Senior Sec	College	University	
It is for women & men are busy to attend	0 (0%)	1 (2.6%)	1 (2.6%)	0 (0%)	0 (0%)	0 (0%)	2 (5.1%)
Men busy, but can attend	0 (0%)	4 (10.3%)	3 (7.7%)	3 (7.7%)	0 (0%)	0 (0%)	10 (25.6%)
Never thought of it	0 (0%)	1 (2.6%)	0 (0%)	3 (7.7%)	1 (2.6%)	0 (0%)	5 (12.8%)
It is for women, men can not attend	1 (2.6%)	9 (23.1%)	2 (5.1%)	4 (10.3%)	0 (0%)	1 (2.6%)	17 (43.6%)
Only escorted, but not attended sessions	0 (0%)	4 (10.3%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	5 (12.8%)
Total Count	1 (2.6%)	19 (48.7%)	6 (15.4%)	11 (28.2%)	1 (2.6%)	1 (2.6%)	39 (100%)

Among the participants with primary education, 9 (23.1%) indicated that it was for women and men can not attend, 4 (10.3%) indicated that men were busy but can attend, another 4 (10.3%) indicated that they can only escort, but not attend the sessions, 1 (2.6%) indicated that it is for women and that men were busy to attend while another 1 (2.6%) indicated that he never thought of it. While among the participants with senior secondary education, 4 (10.3%) indicated that it was for women and men can not attend, 3 (7.7%) indicated that men were busy but can attend, another 3 (7.7%) indicated that they never thought of it, while 1 (2.6%) indicated that they can only escort, but not attend the sessions.

Table 46, The relation between men's views towards male involvement and participation in PMTCT (table 23) and residential area (table 9)

(n=39)

Views on male involvement and participation in PMTCT	Residential Area			Total
	High Density	Low Density	Village	
Men are left out in the programme	8 (20.5%)	2 (5.1%)	6 (15.4%)	16 (41%)
Programme is focused on women	6 (15.4%)	0 (0%)	1 (2.6%)	7 (17.9%)
Inviting men using invitation letters	5 (12.8%)	2 (5.1%)	9 (23.1%)	16 (41%)
Total	19 (48.7%)	4 (10.3%)	16 (41%)	39 (100%)

Among the participants from the villages, 9 (23.1%) indicated that men can be involved and participate in PMTCT by inviting them using invitation letters, 6 (15.4%) indicated that men were left out in the programme while 1 (2.6%) indicated that the programme is more focused on women. For the participants from the high density areas, 8 (20.5%) indicated that men were left out in the programme, 6 (15.4%) indicated that the programme is more focused on women while 5 (12.8%) indicated that men can be involved and participate by inviting them using invitation letters.

Table 47, The relation between women's views on how men can be involved and participate in PMTCT programme (figure 6) and gestation age (table 32)

(n=11)

Women's views on how men can be involved in PMTCT	Gestational age		Total
	2nd Trimester	3rd Trimester	
Couple sensitisation	2 (18.2%)	2 (18.2%)	4 (36.4%)
Conducive environment	1 (9.1%)	2 (18.2%)	3 (27.3%)
Inviting men using invitation letters	2 (18.2%)	2 (18.2%)	4 (36.4%)
Table	5 (45.5%)	6 (54.5%)	11 (100%)

Among the participants in the 2nd trimester, 2 (18.2%) indicated that couple sensitisation on PMTCT would make men get involved and participate in PMTCT, another 2 (18.2%) indicated invitation of men using invitation letters while 1 (9.1%) indicated provision of a conducive environment for males at the PMTCT centres. Among women in the 3rd trimester, 2 (18.2%) indicated couple sensitisation, another 2 (18.2%) indicated invitation of men using invitation letters while the other 2 (18.2%) indicated provision of a conducive environment for males at the PMTCT centres.

D PRACTICE

Table 48, The relation between traditional practices that may promote HIV transmission to the baby from the parents (table 24) and age of male participants (table 5)

(n=39)

Traditional practices	Age in Years						Total
	20-24	25-29	30-34	35-39	40-44	> 45	
Smearing semen (Kukonza Mwana)	4 (10.3%)	3 (7.7%)	7 (17.9%)	5 (12.8%)	8 (20.5%)	2 (5.1%)	29 (74.4%)
Smearing semen & Tattooing	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)
Tattooing	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	1 (2.6%)	0 (0%)	2 (5.1%)
Not certain	0 (0%)	1 (2.6%)	4 (10.3%)	2 (5.1%)	0 (0%)	0 (0%)	7 (17.9%)
Total	4 (10.3%)	5 (12.8%)	12 (30.8%)	7 (17.9%)	9 (23.1%)	2 (5.1%)	39 (100%)

Among the participants who indicated smearing of semen as a traditional practice that may promote HIV transmission to the baby from the parents, 4 (10.3%) were aged between 20-24 years, 3 (7.7%) were aged between 25-29 years, 7 (17.9%) were aged between 30-34 years, 5 (12.8%) were aged between 35-39 years, 8 (20.5%) were aged between 40-44 years and 2 (5.1%) were above 45 years.

Table 49, The relation between traditional practices that may promote HIV transmission to the baby from the parents (table 24) and tribe of male participants (table 8)

(n=39)

Traditional practices	Tribe					Total
	Tumbuka	Ngoni	Chewa	Bisa	Bemba	
Smearing semen (Kukonza Mwana)	6 (15.4%)	7 (17.9%)	15 (38.5%)	1 (2.6%)	0 (0%)	29 (74.4%)
Smearing semen (Kukonza Mwana) & Tattooing	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)
Tattooing	0 (0%)	2 (5.1%)	0 (0%)	0 (0%)	0 (0%)	2 (5.1%)
Not certain	2 (5.1%)	3 (7.7%)	1 (2.6%)	0 (0%)	1 (2.6%)	7 (17.9%)
Total	8 (20.5%)	13 (33.3%)	16 (41%)	1 (2.6%)	1 (2.6%)	39 (100%)

Smearing semen was mentioned by 6 (15.4%) Tumbuka, 7 (17.9%) Ngoni, 15 (38.5%) Chewa and 1 (2.6%) Bisa. No Bemba mentioned this practice. Tattooing was mentioned by Ngoni only, 2 (5.1%). Both semen smearing and tattooing were mentioned by 1 (2.6%) Ngonis. None of the other tribes mentioned the two practices together. Two (5.1%) Tumbukas, 3 (7.7%) Ngonis, 1 (2.6%) Chewas and 1 (2.6%) Bemba did not mention any traditional practice.

Table 50, The relation between traditional practices that may promote HIV transmission to the baby from the parents (Table 24) and educational level of male participants (Table 10)

(n=39)

Traditional practices	Educational Level						Total
	None	Primary	Junior Sec	Senior Sec	College	University	
Smearing semen (Kukonza Mwana)	1 (2.6%)	14 (35.9%)	5 (12.8%)	8 (20.5%)	0 (0%)	1 (2.6%)	29 (74.4%)
Smearing semen & Tattooing	0 (0%)	0 (0%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	1 (2.6%)
Tattooing	0 (0%)	1 (2.6%)	0 (0%)	1 (2.6%)	0 (0%)	0 (0%)	2 (5.1%)
Not certain	0 (0%)	4 (10.3%)	1 (2.6%)	1 (2.6%)	1 (2.6%)	0 (0%)	7 (17.9%)
Total	1 (2.6%)	19 (48.7%)	6 (15.4%)	11 (28.2)	1 (2.6%)	1 (2.6%)	39 (100%)

Among the participants who indicated smearing of semen as a traditional practice that may promote HIV transmission to the baby from the parents, 1 (2.6%) had no formal education, 14 (35.9%) had primary education, 5 (12.8%) had junior secondary education, 1 (2.6%) had university education and none 0 (0%) had college education.

Table 51, Traditional practices in relation to gender**(n=50)**

Traditional practices	Frequency		Total
	Males	Females	
Smearing semen (Kukonza Mwana)	29 (58%)	6 (12%)	35 (70%)
Tattooing	2 (4%)	5 (10%)	7 (14%)
Smearing semen & Tattooing	1 (2%)	0 (0.0%)	1 (2%)
Not certain	7 (14%)	0 (0.0%)	7 (14%)
Total	39 (78%)	11 (22%)	50 (100.0%)

Among the participants who indicated smearing of semen as a traditional practice that may promote HIV transmission to the baby from the parents, 6 (12%) were females and 29 (58%) were males. 1 (2%) male practiced both smearing of semen and tattooing and no female practiced both. Five (10%) females practiced tattooing, while 6 (12%) practiced smearing of semen. Seven (14%) males did not practice any of the.

CHAPTER FIVE

5.0 DISCUSSION OF THE FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM

5.1 INTRODUCTION

The discussion of findings of this study are based on an analysis of responses from the research participants; thirty nine (39) married men and eleven (11) pregnant women living in the urban and rural areas of Chipata district at the time of data collection.

5.2 CHARACTERISTICS OF THE SAMPLE

The age range for male participants was from 20 years to 45 years. The mean age range and modal age range was 30-34 years. The age range for female participants was 20 years to 39 years and the modal age range was 25-29 years. According to the ZDHS 2001-2002 (CSO 2003), 16% of the Zambian population for both males and females are aged between 30-34 years.

The participants were from villages, high density and low density areas. This implies that all socioeconomic groups were represented. All the 39 (100%) male participants were married (**table 5**) and among female participants, 1 (9.1%) was not married (**table 26**). The majority of the male participants, 35 (89.7%) had one wife and 4 (10.3%) had two wives (**table 6**). All participants (both male and female) had children (**table 7 and table 31**). The median number of children among men ranged from 3-5 and for female participants it ranged from 0-2. More of the female participants, 6 (54.5%) were in their 3rd trimester and 5 (45.5%) were in their 2nd trimester (**table 32**).

The dominant tribe among the research participants was Chewa and Ngoni. Among the male participants, 16 (41%) were Chewa and 13 (33.3%) were Ngoni.

Others were; Tumbuka 8 (20.5%), Bisa 1 (2.6%) and Bemba 1 (2.6%) as shown in **table 8**. Among the female participants, 5 (45.5%) were Chewa and 2 (18.2%) were Ngoni (**table 33**). The other tribes were Tumbuka 2 (18.2%) and Nsenga also 2 (18.2%). This can imply that the study setting had cultural pluralism (Thomas, 1995), which is the simultaneous existence of many cultures within the larger society. This situation brings together different cultural beliefs and practices that may be similar or different, influence the interaction within society and influence the health of society.

The other characteristic worthy noting is the education level. The participants had different education levels. These included; university, college, senior secondary education, junior secondary education and primary education. However among the participants some had no formal education. Most of the male participants, 19 (48.7%) had primary education, 11 (28.2%) had senior secondary school education, 6 (15.4%) had junior secondary education and the rest 1 (2.6%) each had college, university or no formal education at all (**table 10**). For the female participants, 6 (54.5%) had junior secondary education, followed by primary education 4 (36.4%) and college education 1 (9.1%) as shown in (**table 28**). There was no one among the female participants with senior secondary education, university education or who never attained formal education.

All the male participants had occupations (**table 11**) and among the female participants, 5 (45.5%) had no occupations (**table 29**). This implies that economically they are dependant on their male partners. The male participants had the following occupations; farming, accounting, clerk, security guard, machine attendant, classified daily employee, traditional healers and business. The female participants had the following occupations; marketer, and teaching. One was still a scholar.

The male participants belonged to the following denominations; 18 (46.2%) RCC, 10 (25.6%) RCZ, 3 (7.7%) SDA and 2 (5.1%) Baptist and Zionist Churches each. The least participants' denominations were RCCG, PGNC, PPL and Anglican Churches at 1 (2.6%) each (**table 12**). Furthermore, the female participants belonged to the following denominations; 5 (45.5%) RCC, 3 (27.3%) PAOG, 2 (18.2%) RCZ and 1 (9.1%) Jehovah's Witness (**table 34**). This implies that all the participants belong to the Christian religion. Religion serves an important role in society. According to Thomas (1995) religion serves as a powerful agent of social control, encouraging conformity to the norms and values surrounding important societal issues.

5.3 DISCUSSION OF VARIABLES

5.3.1 KNOWLEDGE

Having knowledge about PMTCT is an important step in promoting male participation and involvement in PMTCT. The male participants were asked to discuss the following in order to assess their knowledge on; definition of HIV and AIDS, where HIV can be found in the body, MTCT of HIV, HIV prevention and PMTCT programme. The female participants were asked to only discuss where HIV can be found in the body. This was with an assumption that since they were still pregnant and attending ANC, they still had fresh knowledge on the basics of HIV.

The results showed that, 18 (46.2%) males defined HIV as a disease while 21 (53.8%) defined HIV as a virus (**table 13**). Interestingly however, all the 39 (100%) male participants knew that AIDS was a chronic disease caused by HIV (**table 14**). On the question of HIV transmission, the commonly known modes of transmission of HIV among the participants were; through unprotected sex & use of contaminated sharps, 19 (48.7%) as shown in **table 15**. Furthermore, the research findings have revealed that only 1 (2.6%) of the participants knew that HIV could be transmitted through vertical route; MTCT. Most of the participants,

19 (48.7%) knew that the fluid in the body where HIV can be found is in blood (**table 16**). Very few, 3 (7.7%) had knowledge that HIV is found in four main fluids; blood, semen, vaginal fluids and breast milk. Most surprising is that even among the pregnant women the knowledge on where HIV is found in the body was not to the expectation. Only 2 (18.2 %) mentioned the four main fluids (**figure 2**). However, the majority 8 (72.7%) of the female participants knew that HIV is found in blood and breast milk.

The other finding of the research revealed that the male participants generally knew that MTCT was during pregnancy (**table 17**). Only very few, 2 (5.1%) participants knew that MTCT was during pregnancy, delivery & breastfeeding. Furthermore, on the question of prevention of HIV the well known prevention was through abstinence and condom use, as revealed by 10 (25.6%) participants. Surprisingly there was none who exhibited knowledge on the common known acronym ABC (Abstinence, Be faithful and Condom use) as regards to the prevention of HIV.

Therefore, the research findings are revealing that knowledge regarding HIV/AIDS issues and PMTCT is inadequate among both males and females. The revelations of the study show that only 2 (5.1%) out of 11 (100%) male participants with secondary education and 1 (2.6%) with college education were able to mention the four infectious fluids where HIV is found in the body (**table 38**). According to Centre for Control of Diseases and Prevention (2006), the infectious fluids where HIV can be found in the body are; blood, semen (including seminal fluids), vaginal fluid and breast milk. The majority of the participants, 19 (48.7%) knew that in an HIV infected person, the virus is found in blood. This could be attributed to the concepts used when delivering the necessary information. For example, the PMTCT Reference Manual for Health Workers of the MoH/CBoH (2004) Module 3; page 3-3, does not have a component outlining the infectious fluids where HIV can be found in the body. Therefore an elite person

will only have better understanding through reading on his/her own from other literature on HIV/AIDS or go to the World Wide Web (www) to browse for HIV material where it is available.

Similarly among women, the findings revealed that 1 (9.1%) with junior secondary education and 1 (9.1%) with college education knew the four infectious fluids where the virus can be found in an HIV infected person, (**table 39**). Interestingly, some of the participants, 3 (27.3%) with lower level of education (primary education) were able to mention at least three infectious fluids. This can be attributed to the fact that some women do acquire information during PMTCT sensitisations.

All the male participants, 1 (2.6) with college and 1 (2.6) with university education, mentioned the three modes of MTCT (**table 40**). According to the PMTCT Reference Manual for Health Workers of the MoH/CBoH Module 3 (2004), these modes are during pregnancy, during delivery and during breast feeding. None of those with no education, primary, junior secondary education, and senior secondary education mentioned all the three modes of MTCT. They either mentioned one or two modes.

The research has also revealed that the commonly preventive measures in practice in the area are abstinence and condom use (**table 41**). Ten (25.6%) of the male participants indicated so. Five (12.8%) were from villages, 4 (10.3%) were from high residential areas and only 1 (2.6%) was from low residential areas. This can be attributed to HIV prevention campaign of "Abstinence iliche, if you can't abstain, use a condom". The low percentage for low residential area could be attributed to low coverage on sensitisation campaign as residents are considered to be elite.

Therefore, although knowledge on PMTCT was generally inadequate in both male and female participants, those with secondary education and above were more knowledgeable irrespective of their residential area.

5.3.2 COMMUNICATION

Communication is essential in dissemination of information on HIV/AIDS and PMTCT. It is a vehicle that can be used in the delivery of information. Communication is used to share pieces of information. The study revealed that 14 (35.9%) male participants had no source of information on PMTCT (**table 19**). However it is worth noting that majority, 25 (64.1%) of the participants had some source of information. Encouraging revelations were that their sources of information were; 12 (48%) from their wives and another 12 (48%) from media, while only 1 (4%) from the health centre. The data from female participants (**figure 3**) revealed that 7 (63.6%) informed their spouses about the PMTCT programme.

These findings are indicating that the two main sources of information on PMTCT among men are their wives and media, while very few get information directly from the health centre staff. This indicates that although there is communication between spouses and that there are also avenues for information on PMTCT through the media, there is very little direct communication between health workers and the men.

Therefore, it was not surprising that despite 25 (64.1%) of male participants having sources of information about PMTCT (**table 19**), only 4 (10.3%) correctly knew that it involved the activities of giving IEC to pregnant mothers; counselling and administration of ARVs to HIV positive mothers before delivery (**table 20**). The rest of the participants they either mentioned two or only one of the activities at PMTCT. These findings therefore could mean that the information women communicate to their spouses is not adequate.

The research has further revealed that among the 14 (100%) participants who had never heard of the term PMTCT; 6 (42.9%) were from high density residential area followed by 5 (35.7%) from villages and 3 (21.4%) from low density areas (**table 42**). Furthermore, among the 24 (100%) participants who said that they did not know the activities in the PMTCT programme; 13 (54.2%) were from villages, 8 (33.3%) were from high density residential areas and 3 (12.5%) were from low density area (**table 43**).

It can be concluded therefore that, villagers and residents of high density areas are accessing information on PMTCT while residents of low residential areas are not accessing information on PMTCT. This is contrary to the findings of ZDHS 2001-2002 (CSO, 2003) where it was found that men in rural areas have substantially lower access to all forms of media than their urban counterparts. The high percentage of males from the villages not knowing what PMTCT programme was all about was attributed to inconsistency of information from their spouses who are the major sources. The ZDHS 2001-2002 (CSO, 2003), found that more rural women cited getting money for transport, distance to the health facility and availability of transport as big problems than urban women making them not access health care services regularly.

Although the research has revealed that communication between spouses is present, it is not effective as the majority, 24 (61.5%) of the male participants did not know what was involved in PMTCT. The controversy between having adequate sources of information and males not having adequate information on what PMTCT programme is, it is all about the type of information shared.

Many scholars have outlined various barriers to effective communication. According to Cole (2004), some of the barriers are individual bias, status difference, fear, verbal difficulties, and information overload. On individual bias, Cole says "people are selective as they only want to hear what they want to

hear". In this case it means that males could have not paid much attention to what their spouses wanted to communicate to them. The research has revealed that actually 3 (27.3%) of the female participants tried to inform their spouses but these spouses were not interested. Therefore individual bias can be a barrier to flow of PMTCT information to males (**figure 3**).

In the case of status difference, Cole says "superiors may listen less carefully to information passed by their subordinates". In this case since males generally are considered to be superior to females, they could have not paid much attention to the messages from their spouses. Furthermore on the barrier of fear Cole says "if a person has news of information which is almost certain to upset the recipient, they will tend to avoid the whole truth and pass on part of the message". In this case then, women could have withheld certain information that could have upset their spouses. This could have been the reason why 1 (9.1%) of the female participants did not inform the husband about the PMTCT programme (**figure 3**).

On verbal difficulties Cole says "failure to get to the point quickly and concisely and use of jargon and lack of fluency will cause confusion and misunderstanding in communication". In this case the women could have not captured the right information. The majority, 7 (63.6%) of the females participants who said they informed their husbands might not have delivered right messages to their husbands. In Chewa they say "*Kandinverere ananvera zamumarwa*". This means that sending someone to get information will actually bring you wrong information.

Finally, according to Cole, a person given a lot of information at once will not offload exactly. In this case it could be that females/males are given so much information at once which they may not handle effectively.

5.3.3 ATTITUDE

Men's attitude towards PMTCT and ANC was also assessed. Male participants were asked to discuss their views on males attending ANC sessions, what their roles could be in PMTCT and how males could be involved in PMTCT.

Seventeen (43.6%) of the participants viewed ANC as a programme for women and therefore men can not go there to get information, 5 (12.8%) said men can only escort their wives but could not attend the sessions, while another 5 (12.8%) did not take time to think about ANC as part of men's business as well and 10 (25.6%) said they were too busy at work to attend ANC with their wives (**table 21**).

From these findings therefore, the attitude of males towards ANC are portrayed as negative. PMTCT services are integrated into ANC activities; therefore men could have seen it as a programme for women.

The findings on men's views on their role in PMTCT (**table 22**) revealed that 11 (28.2%) expected to take up the role of going for HIV testing, not only letting it be a role of females, while another 11 (28.2%) expected to take up the role of fostering behaviour change among males. The other roles the men viewed as theirs included; 6 (15.4%) said support the women during pregnancy, 5 (12.8%) said encourage women to attend ANC, 4 (10.3%) said supportive role. Two (5.1%) did not know what roles men could take. These findings therefore reveal that despite the portraying negative attitudes towards PMTCT, their views towards the roles they could take are positive.

Interestingly the study also revealed that 16 (41%) of the males realised that men are left out in PMTCT programmes and a further 7 (17.9%) said the programme was focused on women, while 16 (41%) of the participants showed an interest to get involved and participate in PMTCT by suggesting that males should be

invited using invitation letters(**table 23**). This was also echoed by 4 (36.4%) female participants who said men should be invited using invitation letters, other 4 (36.4%) participants is said males can be involved through couple sensitisation and 3 (27.2) saw the need of creating conducive environment at ANC premises for males to feel at ease (**figure 3**).

Therefore these findings show that the attitude of males towards PMTCT is influenced by the current health care delivery systems. It can be said that men are not involved and participating in PMTCT because the service is provided in the ANC making the environment not conducive for the males. Traditionally the ANC services were tailored for women. Therefore the males were automatically delineated from PMTCT programmes. In a study conducted in Malawi on ANC, health workers did not involve males in ANC because the services were tailored for pregnant women and not men. Furthermore, midwives had never thought or discussed about involving men (Misiri, Tadesse, and Muula, 2004)

5.3.4 PRACTICE

The practices of men in PMTCT were investigated. The findings revealed that the majority of the female participants, 6 (54.5%) said men were not helpful in matters of HIV/AIDS and PMTCT (**table 35**). Furthermore, 1 (9.1%) woman said that women were accused of being responsible for the "disease" if the woman is tested positive.

The study revealed that both male and female participants were involved in HIV risky traditional practices which comprised of smearing semen on baby's body (Kukonza mwana) at three to four months old and tattooing of the baby (**table 51**). Of the two traditional practices, the common one is the smearing of semen on the baby (locally known as Kukonza mwana). The majority, 35 (70%) of both male and female participants practiced it [29 (74.4%) male participants and 6 (54.5%) female participants].

The traditional practices are performed in order for the baby to grow healthy with a lot of stamina. It is believed that the child as he or she grows will be physically fit. These traditional practices were not influenced by age, major tribes in the area and educational level (**table 48, table 49 and table 50**).

Traditionally, men are the major decision makers concerning health issues in the households. These findings are indicating that the decisions being made by men influence the well being of their children. Therefore if they are less informed about the details concerning transmission of HIV and PMTCT, there will be a perpetuation of risky traditional practices.

The study has revealed that the risky traditional practices are done across all ages (**table 48**). All 4 (10.3%) of male participants aged between 20-24 years were involved in the practices; majority, 5 (12.8%) of male participants aged between 35-39 years were also involved in the practice, while all the two (5.1%) of male participants aged above 45 years were also involved in the practice.

Furthermore, the findings revealed that the practice is deep rooted in the three major tribes namely Chewa, Ngoni and Tumbuka although other tribes also did indicate involvement in such practices. The study revealed 1 (2.6%) of the participant of Bemba tribe was not involved in such practices. The study revealed that risky traditional practices cut across level of education (**table 50**). The revelations are that; the 1 (2.1%) participant with university education practiced smearing of semen on the baby (**table 49**).

In a study that was done in Nigeria, it was found out that certain traditional practices in rural parts of Africa were creating routes of HIV transmission that are unique to the continent, (Kaiser family foundation, 2005). From these findings therefore, HIV risky traditional practices have been allowed to be practiced without caution and control because men who are the decision makers are not

involved and participating in PMTCT programmes. The traditional practices might lead to a 'wildfire spread' of HIV" among infants whose HIV positive parents have opted formula feeding.

5.4 IMPLICATIONS TO THE HEALTH CARE SYSTEM

Taking the findings of the study into consideration, it shows that there are cultural, socio-economic and health related factors influencing male involvement and participation in PMTCT programme in Chipata District. These factors need to be addressed if PMTCT programme is to be effective in the district.

The traditional practice of smearing semen on the baby shoots down the efforts being made to prevent MTCT of HIV. According to CDC (2006) transmission of HIV is very high when HIV comes in contact with the more porous mucous membranes. The skin of the baby at the age when the practice is performed may be more porous. Furthermore babies at this age usually have heat-rash which may become the entry point for HIV. Therefore, the PMTCT programme's efforts can be frustrated by such traditional practices. An HIV infected who chooses not to breast feed but practices such traditions will risky the baby contract HIV.

Utilisation of knowledge among men on PMTCT remains a challenge for the health system. These findings have implications on the IEC system, with special reference to HIV/AIDS and PMTCT. The silence needs to be broken. Unless continuous IEC and sensitization is carried out men will not get involved and effectively participate in PMTCT. Continuing practicing risky traditional practices will frustrate the national efforts to meet the MDGs number four and number five (Medical Women Association of Zambia, 2006).

5.5 CONCLUSION

The study sought to determine male involvement and participation in PMTCT programmes in Chipata district. The study has revealed that males have adequately not been involved in PMTCT programmes in Chipata district, consequently affecting their participation. The lack of involvement and participation is related to socio-economic factors, cultural factors and health systems delivery factors.

The research findings have shown that although knowledge regarding HIV/AIDS issues and PMTCT is influenced by educational level it is not affected by the residential area. Most of the participants who had senior secondary education were able to at least mention three infectious fluids where HIV is found in the body irrespective of where they resided. Knowledge of MTCT is essential to prevent infants from becoming infected with HIV through vertical transmission from mother to child.

The integration of the PMTCT programme to ANC is an obstacle for males to access the service because the environment is tailored to favour females more than males. Therefore, if men are to be involved in PMTCT, the ANC activities should be redesigned in such a way that men are involved. Low male participation has been found to be attributed to inadequate information for males on PMTCT as they depend on second hand information from their wives which tends to be inadequate most of the time. Health workers have not created avenues for males to get first hand information straight from the health centres. The encouraging fact is that males are willing to get involved and participate in PMTCT programmes.

The efforts of PMTCT programmes in the district will not contribute effectively towards meeting the MDGs by 2015 due to the high level practice of HIV risky traditional practices in the district. Since men are the major decision makers in

many cultures, concerning health issues in the households, their limited involvement in activities related to the care of their wives and newborns imparts negatively to the success of such programmes, PMTCT inclusive.

5.6 RECOMMENDATIONS

5.6.1 TO THE HEALTH CARE PROVIDERS

Health care providers should make deliberate efforts to educate men about PMTCT so that they will be able to make informed choices. This can be done wherever there is opportunity to meet men for example on the wards through their wives as they come for PMTCT services or even calling short sensitization meetings in places where men are found including churches. Community based agents should also be educated on PMTCT so that they can teach men in the communities. Health care providers should read more about PMTCT so that they get all the facts and be able to pass on the information to men.

5.6.2 TO THE DHMT

The DHMT should ensure that health care delivery centres have adequate staffing so that the staff will be able to deliver quality services to the clients, health education inclusive. The DHMT should also ensure that health care delivery centres are giving IEC to the men by carrying out periodic monitoring and evaluation surveys to find out if men have been given the information.

DHMT should provide the IEC materials needed for health workers to teach about PMTCT. Men should be encouraged to come to the ANC clinics with their wives so that they can get the information together. The DHMT should also plan to carry out the study on a larger scale; including the rural areas in order to be able to generalize the findings better and improve the quality of the service.

5.6.3 TO POLICY MAKERS

MoH should plan carrying out national sensitization campaigns on PMTCT so that men are given information about it. MoH should also include indicators to measure male involvement and participation in PMTCT. The current indicators only capture females. This makes it difficult assess male involvement and participation.

MoH should ensure that information about PMTCT reaches the men by including it in the family planning services/clinics. It should be incorporated and activated in the MCH services.

5.7 LIMITATIONS OF THE STUDY

The limitation of the study was that the sample size was too small because of financial and time constraints to be representative of the population in Chipata District.

5.8 DISSEMINATION OF STUDY FINDINGS

The researcher intends to disseminate the study findings by making copies of the report and giving a copy to each of the following; Department of Post Basic Nursing, UNZA, The Medical Library, UNZA, Ministry of Health Headquarters – Library, CIDRZ-Chipata and D.M.O

The researcher also intends to disseminate the findings in seminars and conferences such as ECSACON (East, Central and Southern Africa College for Nurses) meetings that take place, as opportunity arises. Information will also be disseminated to traditional leaders in the district through NGOs as well as local radio stations.

Finally the researcher intends to write a proposal to UNZA research ethics committee so that the research is done on a wider and more scientific way and be published in one of the medical journals.

REFERENCES

1. Central Statistical Office, (2003). ***Zambia Demographic and Health Survey 2001-2002***, Calverton, Maryland.
2. Centre for Control of Diseases and Prevention, (2006). ***HIV Transmission***, CDC, New York, On line [Accessed on 15.01.2007: 16:25Hrs], <http://www.google.co.zm>
3. Chela, M. A. (1998). ***A study on the factors contributing to low participation of men in reproductive health services in Chililabombwe district***, Unpublished diploma thesis, PAID-ESA.
4. Chiparamba Health centre, (2006). ***Action Plan 2006-2008***, CDHMT, Chipata, (Unpublished).
5. Chipata District Health Office, (2006). ***Action Plan 2007-2009***, CDHMT, Chipata, (Unpublished).
6. Chipata Health Centre, (2005). ***Action Plan 2005-2007***, CDHMT, Chipata, (Unpublished).
7. Clark, M. J. (1999). ***Nursing in the Community – Dimensions of Community Health Nursing***, 3rd Ed., Appleton and Lange, Stamford.
8. Cole, G. (2004). ***Management Theory and Practice***, 6th Ed., Thomson Learning, London.

9. Dempsey, P. A. and Dempsey, A. D. (2000). ***Using Nursing Research Process, Critical Evaluation and Utilization***, 5th Ed, Lippincott, Philadelphia.
10. Fisher, A. A, and Foreit, J.R. (2002). ***Designing HIV/AIDS Intervention Studies: An Operations Research Handbook***, Population Council, New York.
11. Garson, P. (2005). ***Men think we bring the Disease – Challenges Facing Positive Mothers in Soweto***, Nelson Mandela foundation, South Africa, On Line, [Accessed on 05.05.2006: 16:25Hrs], http://www.ijourn-aids.org/docs/ja_research_babysteps.pdf
12. Ghosh, B.N. (2003). ***Scientific Method and Social Research***, Revised Ed, Sterling Publishers Private Limited, New Delhi.
13. HMIS, (2006). ***First Quarter Antenatal Clinic utilisation Report***, Chipata DHMT, Chipata, (Unpublished).
14. Kaiser Family Foundation (2005). ***Traditional Practices in Rural Africa Contributing to Spread of HIV, Researchers Say***, Medical News, On Line, [Accessed on 05.01.2007: 16:25Hrs], <http://www.kaisernetwork.org/dailyreports/healthpolicy>
15. Kapata Health Centre (2006). ***Action Plan 2007-2009***, Chipata DHMT, Chipata, (Unpublished).
16. Makwe HMIS, (2006). ***Action Plan 2007-2009***, Chipata DHMT, Chipata, (Unpublished).

17. Medical Women Association of Zambia, (2006). ***An invitation to the Regional Congress of the Near East and Africa Region on medical women and the Millennium Development Goals (MDGs) progress and prospects: The impact of HIV/AIDS on the attainment of the MDGs***, On Line, [Accessed on 05.04.2006: 16: 52Hrs]
<http://www.mwaz.org.zm/whomwaz.html>.
18. Ministry of Finance and National Planning, (2006). ***Zambia Millennium Development Goals – Status Report 2005***, Ministry of Finance and National Planning, Lusaka
19. Misiri, H.E, Tadesse, E. and Muula, A. S. (2004). ***Are Public Antenatal Clinics in Blantyre, Malawi, Ready to Offer Services for the Prevention of Vertical Transmission of HIV?***, Women's Health and Action Research Centre – Bioline International, Blantyre, On Line, [Accessed on 05.05.2006: 16:25Hrs], <http://www.bioline.org.br/>
20. MoH, (1999). ***Trainer's Guide for the Reduction of Mother to Child Transmission of HIV***, MoH, Lusaka.
21. MoH, (2004). ***Prevention of Mother to Child Transmission of HIV - A Reference Manual for Health Workers***, MoH, Lusaka
22. MoH, (2004). ***Prevention of Mother to Child Transmission of HIV – Presentation Graphics for Trainers***, On Line, [Accessed on 26.04.2006: 13:15Hrs],<http://www.cboh.gov.zm/documents/reproductive/PMTCT%20presentations%20may%202004.pdf>
23. MOH, (2005). ***Zambia Antenatal Clinic sentinel Surveillance Report, 1994 – 2004***, Dapeg, Lusaka

24. Moore, M. (2003). ***A Behaviour Change Perspective on Integrating PMTCT and Safe motherhood Programmes: A Discussion paper***, The CHANGE Project AED/The Monoff Group, Washington DC, On Line, [Accessed on 26.04.2006: 13:10Hrs],
<http://www.manoffgroup.com/Documents/PMTCTSM%20final.pdf>
25. Morse, J. M. and Field, P. A. (1996). ***Nursing Research – The Application of Qualitative Approaches***, 2nd Ed, Chapman & Hall, London.
26. Mugo, F. W. (2004). ***Sampling in Research***, [Accessed on 20th April 2006], www.google.org/samplinginresearch
27. Mwesigwa, K. M. (2003). ***Report of the Regional PMTCT Meeting – Botanical Beach Hotel***, Uganda AIDS Commission, Entebbe, [Accessed on 20th April 2006],
http://www.aidsuganda.org/pdf/Regional_PMTCT_Rprt.pdf
28. National AIDS Council, (2004). ***National AIDS Joint Review of the National HIV/AIDS/STI/TB Intervention Strategic Plan (2002 - 2005) and Operations of the National AIDS Council***, On Line, [Accessed on 30.04.2006: 15:20Hrs],
<http://www.zambiaaids.org.zm/download/nacjointreview.doc>
29. Neuman, W. L. (2006). ***Social Research Methods; Qualitative and Quantitative Approaches***. 6th Ed, Pearson AB International, Boston

30. Osborne, C.M. (2002). ***Report on the Satellite Meeting on "Scaling Up a Comprehensive Response to Prevention of HIV Infection to Pregnant Women, Mothers and their Children"***, World Bank, Barcelona, On Line, [Accessed on 20.04.2006: 13:25Hrs],
<http://topics.developmentgateway.org/pmtct/rc/filedownload.do?itemId=255160>

31. Polit, F. D. and Hungler, P. B. (1997). ***Essentials of Nursing Research***, 5th Ed, Lippincott Company, Philadelphia.

32. Robey, B, Thomas, E, Baro, S, Kone, S, & Kpakpo, G. (1998). ***Men: Key Partners in Reproductive Health – A Report on the First Conference of French-Speaking African Countries on Men's Participation in Reproductive Health***, UNFPA/USAID, Ouagadougou.

33. Rouw, M. (2002). ***Male Involvement in PMTCT-Activities - Concerns and ways to overcome the Obstacles***, SafAIDS, On Line, [Accessed on 26.04.2006: 13:25Hrs].
<http://topics.developmentgateway.org/pmtct/rc/filedownload.do~itemId=247616>

34. Thomas, W. L. (1999). ***Sociology the Study of Human Relationships***, 5th Ed., Harcourt Brace & Company, New York

35. Treece, E. W, and Treece, J. W. (1986). ***Element of Research in Nursing***, 4th Ed, C.V.Mosby Company, St. Louis, Missouri.

36. UNAIDS, (2004). ***Zambia – Joint United Nations Programme on HIV/AIDS*** Geneva, On Line, [Accessed on 26.04.2006: 13:25Hrs],
<http://www.unaids.org/en/geographical+area/by+country/zambia.asp>.

37. Uys, H.H.M. and Basson, A.A. (2000). ***Research Methodology in Nursing***, Kegiso Tertiary, Cape Town.
38. Walston, N. (2005). ***Challenges and Opportunities for Male Involvement in Reproductive Health in Cambodia - POLICY Project***, USAID, Cambodia. On Line, [Accessed on 05.05.2006: 16:25Hrs], http://www.policyproject.com/pubs/countryreports/MaleInvolv_Cam.pdf

APPENDICES

APPENDIX 1. FOCUS GROUP DISCUSSION GUIDE FOR MEN

THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF NURSING

FOCUS GROUP DISCUSSION GUIDE ON MALE INVOLVEMENT AND PARTICIPATION IN PREVENTION OF
MOTHER TO CHILD TRANSMISSION (PMTCT) OF HIV/AIDS IN CHIPATA DISTRICT

Name of the institution :

Date :

Name of the Moderator :

Names of recorders :

Participants List

[illegible]

1. Welcome / introduction and purpose of the discussion.
2. In your own words what is HIV?
3. In your own words what is AIDS?
4. How can HIV be transmitted from person to person?
5. Where can HIV found in the human body?
6. How can a child contract HIV from the mother?
7. How can HIV/AIDS be prevented?
8. What do you understand by PMTCT programmes?
9. What are your views on males attending Antenatal Clinics with wives?
10. What would you do if you were invited for PMTCT services? (Substantiate your answer)
11. Explain some of the traditional practices that are performed by men and women following birth that promote transmission of HIV from parents to the child?
12. How best can this practice be done?
13. What are the roles of men in PMTCT programmes?

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

APPENDIX 2. FOCUS GROUP DISCUSSION GUIDE FOR WOMEN

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE
DEPARTMENT OF NURSING**

**FOCUS GROUP DISCUSSION GUIDE ON MALE INVOLVEMENT AND PARTICIPATION IN PREVENTION OF
MOTHER TO CHILD TRANSMISSION (PMTCT) OF HIV/AIDS IN CHIPATA DISTRICT**

Name of the institution :

Date :

Name of the Moderator :

Names of recorders :

Participants List

[illegible]

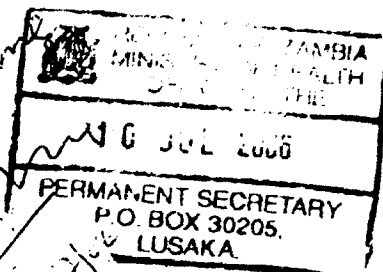
1. Welcome / introduction and purpose of the discussion.
2. You have been coming here for 2 times or more and you have had health education on HIV/AIDS as well as PMTCT. How can a child contact HIV from the parents?
3. Where in the body can HIV be found?
4. In your opinion, how are men involved and participating PMTCT. Please substantiate your opinion.
5. How have you communicated PMTCT information to your husbands?
6. What problems have you faced or heard that women encounter on issues of PMTCT?
7. What traditional practices do you think can promote the spread of HIV to the baby when parents practice them?
8. How can men get involved and participate in PMTCT?

THANK YOU VERY MUCH FOR YOUR PARTICIPATION!

APPENDIX 3.

APPLICATION LETTER FOR AUTHORITY

*Ms. Mwenye
University of Zambia
Department of Nursing
P.O. Box 510119
Lusaka*

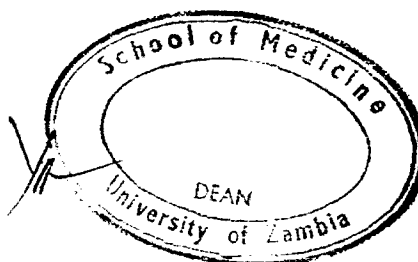


University of Zambia
School of Medicine
Department of Nursing
P.O. Box 510119
Lusaka

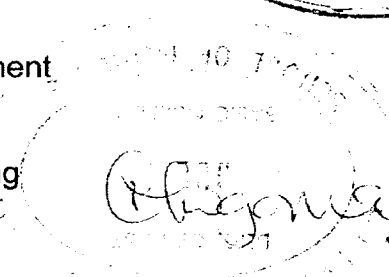
6th July, 2006.

The Permanent Secretary
Ministry of Health
Lusaka

UFS. The Dean
University of Zambia
School of Medicine
P.O. Box 510119
Lusaka



UFS. The Head of Department
University of Zambia
School of Medicine
Department of Nursing
P.O. Box 510119
Lusaka



*DPNR
Review +
draft 2006
25
12/07*

Dear Sir,

**REF: REQUEST FOR PERMISSION TO CARRY OUT RESEARCH IN
CHIPATA DISTRICT**

I am a 4th Year Student at UNZA, School of Medicine, and Department of Nursing studying for BSc.Nrs. One of the requirements for the degree is to carry out an academic research and contribute to the body of knowledge on any topic or field.

With reference to the above I have chosen to carry out research on PMTCT programme. The research title is "**Male Involvement and Participation in Prevention of Mother to Child Transmission (PMTCT) of HIV/AIDS in Chipata District**". The problem existing is that there is low male involvement and participation in PMTCT in Chipata district. The aim of the study is to identify factors contributing to low male involvement and participation in PMTCT in Chipata district. This research will not be for academics only but also aimed at strengthening PMTCT programme in the district and reduce HIV/AIDS spread and its effects on families in the district.



I therefore ask for your permission to do this academic research in Chipata District in Eastern Province.

Your consideration will be highly appreciated.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'Rodgers Gift Benkele', written in a cursive style.

Rodgers Gift Benkele (RN)
Student – BSc.Nrs. UNZA

APPENDIX 4. ETHICAL APPROVAL LETTER FROM THE
DEPARTMENT OF NURSING



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

Telephone: 252453
Telegrams: UNZA. LUSAKA
Telex: UNZALUZA 44370
Fax: +260-1-250753
E.mail: pbn@coppernet.zm

P.O. Box 50110
Lusaka, Zambia

13th July 2006

The permanent Secretary
Ministry of Health
P.O. Box 30205
LUSAKA

Dear Sir,

Re: **Ethical Approval for undergraduate research project**

The above refers:

I write to inform you that undergraduate research projects at the School of Medicine do not require ethical approval from the ethics and research committee unless for masters degree level. This is because their research projects do not cause physical harm on the subjects.

Thank you


C.M. Ngoma (Mrs)

Head/Department of Post Basic Nursing.

APPENDIX 5. AUTHORITY LETTER FROM THE MINISTRY OF HEALTH

*All correspondence to be addressed to the
Permanent Secretary
Telephone 253040/5
Fax 253044*



In reply please quote

No.

REPUBLIC OF ZAMBIA

MINISTRY OF HEALTH

NDEKE HOUSE
P O Box 30205
LUSAKA

14th July, 2006.

Dr. F.B. Kabulubulu
The Provincial Health Director
Eastern Province
P.O. Box 510023
CHIPATA

Dear Dr. Kabulubulu,

REF: AUTHORITY TO CONDUCT A RESEARCH STUDY IN CHIPATA DISTRICT

This is to introduce for Mr. Rodgers Gift Benkele a 4th Year Student at UNZA, School of Medicine, and Department of Nursing. As part of this degree requirement he seeks to undertake a research study on "**Male Involvement and Participation in Prevention of Mother to Child Transmission (PMTCT) of HIV/AIDS in Chipata District**".

Please be informed that there is a standing arrangement for UNZA students conducting studies of academic nature to have a waiver on the ethical approval and clearance. It is in this regard that we are granting permission for the officer to be allowed to conduct this study in the absence of ethical clearance and approval by the UNZA Ethics Committee.

The study findings will augment efforts aimed at strengthening PMTCT service provision in Chipata district. Please provide support and encouragement to the up coming young researcher.

Attached please find a copy of the letter from the Head of Department, Nursing - Ridgeway Campus for your ease of reference.

Yours Sincerely,



Dr. V. Mukonka
Director Public Health and Research
For/Permanent Secretary

C.C. Executive Director Chipata General Hospital
C.C. District Director of Health, Chipata
C.C. Mr. Rodgers Gift Benkele, Department of Nursing - UNZA

APPENDIX 6. AUTHORITY LETTER FROM THE DISTRICT

Telephone: 260 (6) 221298
Quote

in Reply Please

Fax: 260 (6) 221298

No. CDHO/EP/53/2/2



**REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH**

**DISTRICT HEALTH OFFICE
EASTERN PROVINCE
P.O. BOX 511205
CHIPATA**

25th September 2006

The Health Centre In charges:

- ✓ Chipata Health Centre
- ✓ Kapata Urban
- ✓ Chiparamba

CHIPATA

**RE: CONDUCTING OF RESEARCH AT YOUR CENTRES-MR. RODGERS
BENKELE**

This serves to introduce Mr. Benkele who is a student at the University of Zambia (UNZA) in PMTCT issues. He has been permitted to conduct the research work in the district.

The purpose of my writing therefore is to urge you to provide the necessary support to enable him carry out his research.

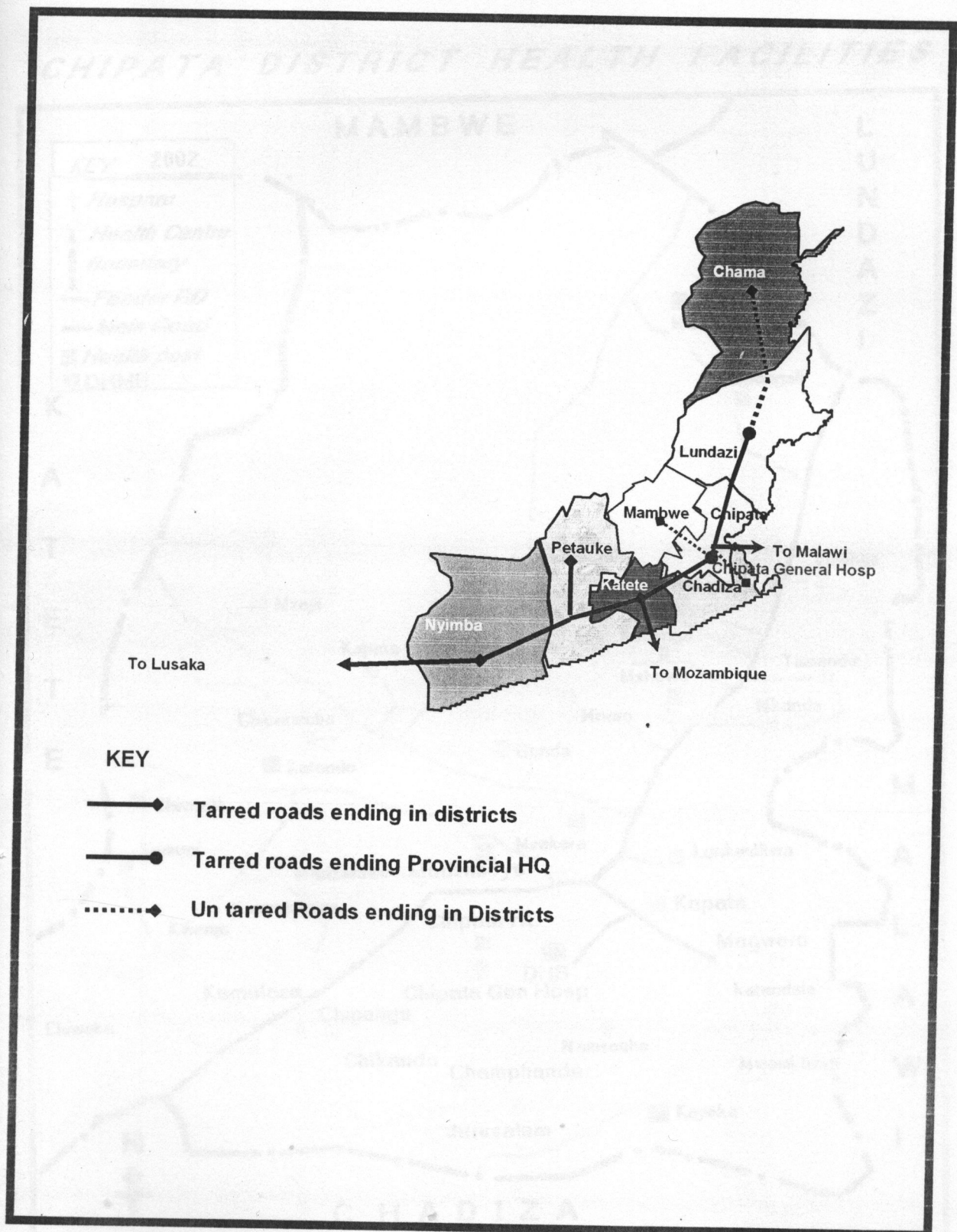
Dr .P. M. Zulu

District Director of Health
CHIPATA DISTRICT

cz/

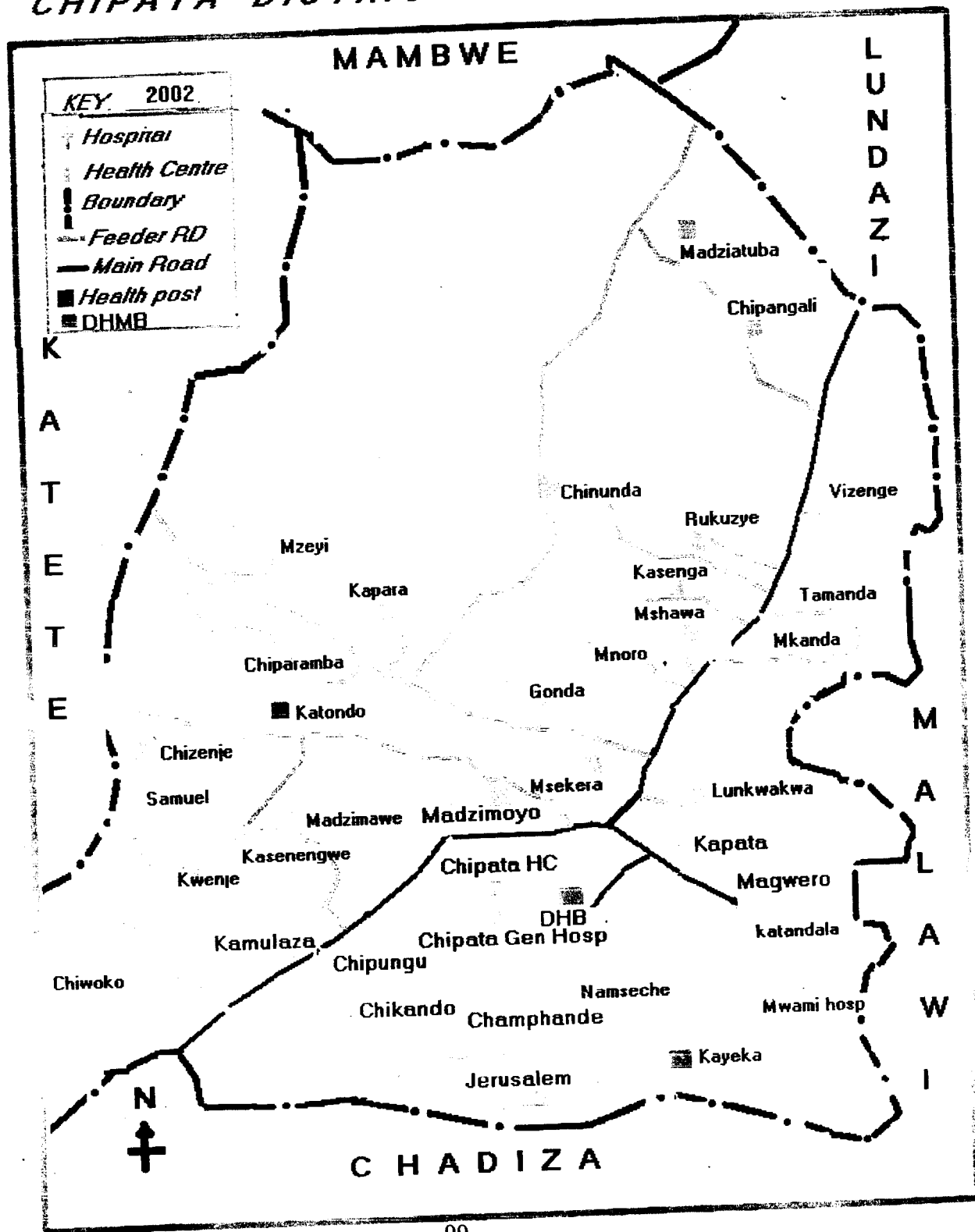
c.c. Mr. Rodgers Benkele

APPENDIX 7. MAP OF EASTERN PROVINCE



APPENDIX 8. MAP OF CHIPATA DISTRICT

CHIPATA DISTRICT HEALTH FACILITIES

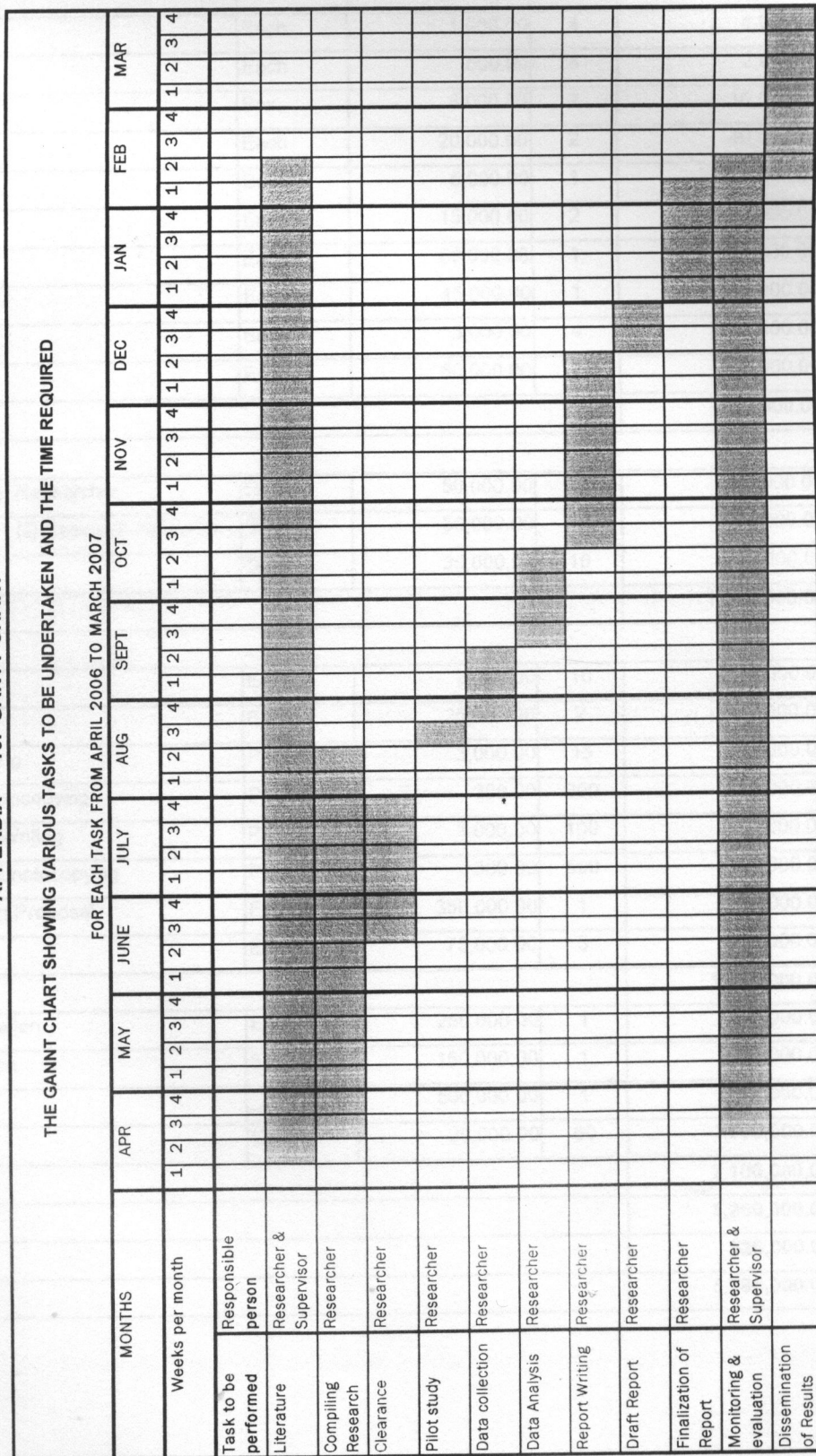


APPENDIX 9. WORK SCHEDULE

FROM APRIL 2006 TO MARCH 2007

Task to be performed	Responsible person	Dates	Time required
Literature	Researcher & Supervisor	Continuous	Continuous
Compiling Research Proposal	Researcher	18th April 2006 to 14th August 2006	16 Weeks
Clearance	Researcher	19th June 2006 to 31st July 2006	6 Weeks
Pilot study	Researcher	21st August to 25th August 2006	5 days
Data collection	Researcher	28th August 2006 to 15th September 2006	3 Weeks
Data Analysis	Researcher	18th September 2006 to 13th October 2006	4 Weeks
Report Writing	Researcher	16th October 2006 to 15th December 2006	8 Weeks
Draft Report	Researcher	18th December 2006 to 31st December 2006	2 Weeks
Finalization of Report	Researcher	1st January 2007 to 9th February 2007	5 Weeks
Monitoring & evaluation	Researcher & Supervisor	Continuous	Continuous
Dissemination of Results	Researcher	12th February 2006 to 31 March 2006	7 Weeks

APPENDIX 10. GANTT CHART



APPENDIX 11. BUDGET

BUDGET CATEGORY	UNIT	UNIT COST (K)	QTY	TOTAL (K)
Stationery				
(a) Duplicating Paper	Ream	25,000.00	4	100,000.00
(b) Pens	Each	1,000.00	4	4,000.00
(c) Pencil	Each	500.00	4	2,000.00
(d) Rubber	Each	1,000.00	4	4,000.00
(e) Note books	Each	500.00	4	2,000.00
(f) Tipex	Box	8,000.00	2	16,000.00
(g) Staplers	Each	20,000.00	2	40,000.00
(h) Box of Staples	Box	5,000.00	1	5,000.00
(i) Files	Each	15,000.00	2	30,000.00
(j) Scientific calculator	Each	60,000.00	1	60,000.00
(k) Flip chart	Each	45,000.00	1	45,000.00
(l) Markers	Each	3,000.00	4	12,000.00
(m) Tape Recorder	Each	60,000.00	1	60,000.00
Subtotal				380,000.00
Personnel				
(a) Lunch Allowance (i) Researcher	Days	50,000.00	10	500,000.00
(ii) Research Assistant	Days	50,000.00	10	500,000.00
(b) Transport	Days	30,000.00	10	300,000.00
Subtotal				1,300,000.00
Secretarial Services				
(a) Diskettes	Each	3,000.00	10	30,000.00
(b) Bag for stationery	Each	25,000.00	2	50,000.00
(c) Questionnaire typing	Pages	3,000.00	15	45,000.00
(d) Questionnaire photocopying	Pages	300.00	600	180,000.00
(e) Research Report Writing	Pages	3,000.00	100	300,000.00
(f) Research Report photocopying	Pages	300.00	500	150,000.00
(g) Typing and binding Proposal	Each	350,000.00	1	350,000.00
(h) Binding Report	Each	75,000.00	5	375,000.00
Subtotal				1,480,000.00
Hall Hire for dissemination	Each	250,000.00	1	250,000.00
LCD Hire dissemination	Each	150,000.00	1	150,000.00
Stationery	—	500,000.00	1	500,000.00
Refreshments	Each	20,000.00	60	1,200,000.00
Subtotal				2,100,000.00
Total				5,260,000.00
Contingency 10%				526,000.00
GRAND TOTAL				5,786,000.00

JUSTIFICATION FOR THE BUDGET

a) Stationery

Stationery is required for typing the research proposal, writing the final research report as well as typing and printing the report. Interview schedules will be produced using the same stationary. The notebooks are needed for record keeping during data collection and analysis. The scientific calculator is required for data analysis. The tape recorder is for recording the FGD. The stapler and staples are needed to put papers together and to maintain their proper arrangement. Tipex will be used to erase errors. Files and bags will be used for storing the interview schedules during the data analysis period.

b) Secretarial Services

There will be need for funds to cater for the typing and photocopying services. Diskettes will be required for data storage. The research bags are needed for carrying the interview schedules. Money is also required for binding the research proposal and report.

c) Personnel

Funds for transport will be required to move to and from the area of data collection. There will also be need for lunch allowance during the data collection period.

d) Contingency

Contingency is the 10% of the total amount of the budget. It is required to cater for any unseen expenses during the research.

e) Dissemination Workshop

The dissemination workshop will be required to communicate the research findings to the stakeholders in the district such as CIDRZ and the DHM and traditional leaders.