

**THE UNIVERSITY OF ZAMBIA
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DEPARTMENT OF POST BASIC NURSING

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**A STUDY TO DETERMINE THE KNOWLEDGE,
ATTITUDE AND EXPERIENCES OF PREGNANT
WOMEN TOWARDS PREVENTION OF MOTHER TO
CHILD TRANSMISSION OF HIV/AIDS AT UTH AND
CHIKANKATA MISSION HOSPITAL**

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ABBREVIATIONS

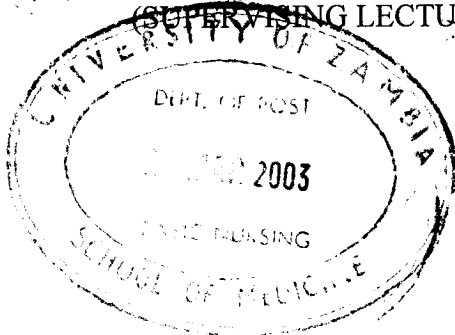
AIDS	-	Acquired Immunodeficiency Syndrome
ARV	-	Anti retroviral
CBOH	-	Central Board of Health
HIV	-	Human Immunodeficiency Virus
IEC	-	Information Education and Communication
IgA	-	Immunoglobulin A
IgG	-	Immunoglobulin G
IgM	-	Immunoglobulin M
MCH	-	Maternal and Child Health
MOH	-	Ministry of Health
MTCT	-	Mother to Child Transmission
NASTLP	-	National AIDS/STD/TB/Leprosy
NVP	-	Nevirapine
PMTCT	-	Prevention of Mother to Child Transmission
UNAIDS	-	Joint United Nations Programme on HIV/AIDS
UNFPA	-	United Nations Population Fund
UNICEF	-	United Nations Children's Fund
USAID	-	United States Agency for International Development
WHO	-	World Health Organization
VCT	-	Voluntary Counselling Testing
ZDHS	-	Zambia Demographic and Health Survey
ZDV	-	Zidovudine (azido thymadine or AZT)

DECLARATION

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

SIGNED: *M Chelley* DATE: *20:03:03*
(CANDIDATE)

APPROVED BY: *Museba* DATE: *20/3/03*
(SUPERVISING LECTURER)



STATEMENT

I hereby certify that this study is entirely the result of my own independent investigation. The various sources to which I am greatly indebted are gratefully and clearly acknowledged in the text and in the references.

SIGNED: *W. O'Connell* DATE: 20:03:03
(CANDIDATE)

DEDICATION

This study is dedicated to my precious Mother, Mrs Hope B. Chella, all my Brothers and Sisters for their constant support and prayers. To my special friend Göran Mellbin and the fond memories of my late loving Father, Mr. Phillip K. Chella who taught me to always work hard.

ABSTRACT

Mother to Child Transmission is by far the largest source of HIV infection in children below the age of 15 and has become a critical child health problem in Africa.

The aim of the study was to determine the Knowledge, Attitude and Experiences of pregnant women towards the Prevention of Mother to Child Transmission of HIV at UTH and Chikankata Mission Hospital. The literature for the study looked at Mother to Child Transmission (MTCT) of HIV as a worldwide problem. Reference was made to global, regional and national studies on MTCT obtained from local and international publications.

A comparative, cross-sectional, descriptive and non-interventional study design was used. The study units were drawn from an urban and rural site between August and September, 2002. A sample comprising 60 respondents, i.e. 30 from the urban (UTH) and 30 from the rural (Chikankata) were selected by simple random sampling with replacement. A structured interview schedule was used to collect data for pregnant women. The Data collected was analysed manually.

The results of the study revealed that 30% of the respondents with low level of knowledge were from Chikankata while only 7% were from UTH. Majority of the respondents from both Chikankata and UTH that is 77% had medium level of knowledge. It also revealed that all respondents from UTH had a positive attitude while 33% of

Chikankata respondents had a negative attitude. Majority of the respondents from both Chikankata and UTH had good experiences.

It is evident from the study that the level of knowledge greatly influences attitude, while attitude also influences the experiences. An individual who is knowledgeable about a certain topic is inclined to have a positive attitude as observed in the research subjects. On the other hand, the level of knowledge does not necessarily determine the level of experience, hence there was no relationship between knowledge and experience.

It was concluded from the study that knowledge on PMTCT of HIV, enabled the pregnant women develop positive attitude which in turn resulted to good experiences.

The major recommendations of the study was that the government of Zambia through Ministry of Health and co-operating partners should also establish MTCT centres in rural areas such as Chikankata. The health care providers also need to re-evaluate the Information, Education and Communication strategies on PMTCT, as it needs to be intensified and integrated in the routine antenatal care services.

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

Zambia is a landlocked country situated in the Central part of Africa within the sub-Saharan region, and it covers an area of 752,612 square kilometres (sqkms). It shares borders with the Democratic Republic of Congo and Tanzania in the north; Malawi and Mozambique in the east; Zimbabwe and Botswana in the south; Namibia in the south-west and Angola in the west. Administratively, the country is divided into nine provinces and these provinces are further divided into 72 districts. (CSO, 1996).

The total population of Zambia is 10,285,631 and consists of 50.7% females and 49.3% males. From the total population 45% are children aged 0-14 years and 15% of these are children under 5 years old (CSO: LCSM, 1998). The above figures clearly indicate that the female population is higher than the men and the children consists of almost half of the total population.

Health care in Zambia is provided by the Ministry of Health (MOH) through the Central Board of Health (CBoH), Churches Medical Association of Zambia (CMAZ), the Private Medical practitioners and the Traditional Healer Services. By 1995 there were 86 hospitals and 1,345 health centres in the country. About 60% of the bed capacity is provided by the government hospitals and health centres. 26% is provided by the Mission hospitals and 13% by Zambia Consolidated Copper Mines. 20% of the health centres are private clinics (Ministry of Health, 1995).

Every Zambian cannot access the available health services, especially those living in remote areas where health facilities are located over 60 km apart. In 1991 only 59% of

the population of Zambia were said to be living within 30 km radius of a hospital (Republic of Zambia, 1997).

The Government of Zambia is committed to the fundamental and humane principle in the development of the health care system to provide Zambians with equity of access to cost-effective quality health care as close to the family as possible. In order to facilitate the attainment of this vision, the government has adopted the Primary Health Care strategy as the most appropriate vehicle (MOH, National Health Policies and Strategies, 1991).

The Primary health Care concept has focused on many components of which Maternal and Child health care is of importance. This is because women and children are part of the most vulnerable groups that are predisposed to high rates of morbidity and mortality. Some of the leading causes of morbidity and mortality in children are due to preventable diseases such as malaria, acute respiratory infections, diarrhoeal diseases, anaemia, and malnutrition. (CBoH: ITG, 1997).

Women in the child-bearing age are also prone to many infections and obstetrical complications during the antenatal, intrapartum and postpartum period. Some of the causes of mortality and morbidity in women include obstetrical complications such as pre-eclampsia, puerperal sepsis, antepartum and postpartum haemorrhage and septic abortion (Graham, 1991).

Other non-obstetrical conditions include, anaemia, malaria and sexually transmitted infections. Due to the vulnerability of women and children the Health Care system in Zambia through Primary Health Care has emphasized the provision of Maternal Child Health services in all health centres. As well as at the community level where Community

Based Agents (CBAs) e.g. Traditional Birth Attendants, Community Health Workers, Community Based Distributors are all involved in provision of Maternal Child Health Services. Women and children are prone to various types of infections including HIV/AIDS.

The vulnerability of women to HIV infection is precipitated by a number of factors and some of these factors are biological, socio-cultural, epidemiological and economical. Biologically, women are more at risk than men because a larger mucosal surface is exposed during sexual intercourse and also semen carries a greater concentration of the virus than vaginal fluid. Younger women are at even more risk as their cervix is immature, have scant vaginal secretions and are prone to vaginal laceration during sexual intercourse, increasing the chances of HIV infection. Culturally, certain traditional practices like 'dry sex', where the vagina is allowed to contract by using herbs, results in cuts or abrasions that allow in infection. "In many cultures men are traditionally expected to be assertive and women passive in their sexual relationships. There is a double standard for virginity and fidelity after marriage". (WHO: Global Programme on AIDS, 1992-1993).

This entails that a woman in marriage is expected to be faithful whereas men are not. This results in men having many other sexual partners predisposing their wives to HIV infection. Since women are expected to be passive and not discuss sexual matters freely with their spouses, they cannot negotiate for safer sex through the use of condoms. Women are epidemiologically vulnerable to HIV transmission through blood, because they frequently require a blood transfusion during pregnancy or childbirth due to anaemia or haemorrhage.

Socially, they are more vulnerable because they tend to marry or have sex with older men who have had a number of sexual partners. Young girls are often emotionally immature, economically disadvantaged and socially inexperienced making them vulnerable to sexual relationships that may expose them to HIV and to other sexually transmitted infections that can potentiate HIV transmission. Prevalence figures suggest that girls are exposed to HIV earlier than boys (UNAIDS 1999). The lower social and marginal economic status of women, make them more dependent on their partners, despite the promiscuous behaviour of their partner, they are obliged to stay in marriage due to fear of abandonment and lack of social security.

Other factors leading to high rates of infection in women are genital mutilation, polygamy and cultural practices such as sexual cleansing after the death of a spouse. Women take chances to get married, regardless of whom they are marrying, for fear of stigmatization from society if they remain single. A lot of women believe one can only have integrity if they are married. This predisposes them to HIV infection, as they do not even know the HIV status of their spouses. All these factors increase the vulnerability of women to HIV than their male counterparts as well as the chances of spreading HIV infection to the baby.

Human Immuno - deficiency Virus (HIV) is an infection that causes Acquired Immunodeficiency Syndrome (AIDS). There are two (2) different types of HIV infection. HIV-1 is the most common type, found worldwide and HIV-2 is mainly found in West Africa. The HIV infection affects the immune system, which is the body's defence against infections by microorganisms resulting to immunodeficiency.

The HIV pandemic was declared by WHO (1999) as an emergency as the HIV/AIDS continues to spread rapidly around the world. Worldwide at least 33 million people are

living with HIV/AIDS and another 14 million have died. The HIV infection continues to spread causing nearly 16,000 new infections a day. (UNAIDS, 1998).

Although Africa's population is only 10% of the world's population, it has 70% of global HIV/AIDS i.e. 23.4 million adults and 1 million children up to age 14 (UNAIDS, 2000). Sub-Saharan Africa has been the worst affected region. The percentage of the population infected with HIV ranges from less than 1% across the continent to more than 25-30% in certain cities in eastern, southern and central Africa. (UNECA,1996). Zambia is one of the seriously affected countries within sub-Saharan Africa by HIV/AIDS with a high prevalence of 20% of the total population and the epidemic continues to have a devastating effect. (MOH: CBoH, 1997).

The principal mode of transmission is heterosexual and mother to child transmission resulting to women and children being more vulnerable than men. This implies that 950,000 adults are infected with HIV of whom 450,000 are women between 15 –49 years and 70,000 children from birth to 14 years. (UNAIDS, 2001). Mother to Child Transmission is by far the largest source of HIV infection in children below 15 years. To date around nine (9) to ten (10) of all HIV infected babies have been born in sub-Saharan Africa. It is estimated that 30-40% of infants born to women infected with HIV become infected themselves. In addition to this there are 650,000 orphans due to HIV/AIDS. (MOH: CBoH, 1997).

Children who are HIV infected have a rapid disease progression due to factors such as early and frequent exposure to multiple infections, high rates of malnutrition and limited health care (Dray-Sprit et al, 2000). This has contributed to morbidity and significantly increased child mortality in previous decades. The AIDS epidemic has claimed the lives of nearly 3 million children and another 1 million are living with HIV today (UNAIDS,

1999). In developing countries there are estimated 1600 new infections each day in children of which the major mode acquisition of infection is mother to child transmission (Dabis et al, 2000). The high rate of HIV infection in women and children shows the intensity of the problem and need for urgency in adopting measures to reduce MTCT of HIV. To combat this problem UNICEF, WHO, UNFPA and UNAIDS launched a joint initiative, the Inter Agency Task Team on Prevention of Mother to Child Transmission (PMTCT) with an overall aim to give strong and coordinated leadership.

Zambia was chosen to be one of the 11 countries to pilot the feasibility of an intervention to reduce the transmission of HIV from mother to child. In 1998, the PMTCT working group was formed by Ministry of Health to spearhead and coordinate activities related to PMTCT of HIV infection in Zambia. This working group is also an advisory group to the government. The PMTCT only began to provide services in mid-2000. Mukuka and Siyandi (1999) outlines the four (4) interventions to reduce mother to child transmission of HIV in Zambia and these are:-

- ◆ Integration of a minimum package of care (which includes anti-retroviral dosing into antenatal and delivery services).
- ◆ Counseling on feeding practices.
- ◆ Involvement of the communities.
- ◆ Advocacy and programme communication through sensitisation of health services and community members, also policy makers.

Other components of PMTCT package include: -

- ◆ Strengthening of antenatal care (ANC) for all pregnant women.
- ◆ Provision of confidential counseling and voluntary HIV testing for women and their partners.
- ◆ Monitoring and evaluation.

The application and utilization of the PMTCT package, is hoped to reduce Mother to Child Transmission of HIV.

In order to carry out the PMTCT health activities packages. Pilot study projects have been set up at six sites in Zambia. The six sites are Mbala, Tulemane, Monze, Keemba, Chipata Health Centre and UTH.

There are other Co-operating partners who work with the government through MOH and CBoH. The Co-operating partners are USAID, UNICEF, NORAD, JICA, WHO. Their main role is provision of resources such as technical support, infrastructure, and literature on MTCT and antiretroviral drugs.

At a small scale, other organizations such as non-governmental organizations, also support MTCT programmes for example ZHIP (which assists in designing the literature for Information Education and Communication). The churches participate in sensitization of the communities on the importance of VCT and PMTCT. This is done in order to reduce stigmatization. The communities are also actively involved especially in areas where there are MTCT programmes. MTCT secretariat staff and health personnel have trained Community Based Agents such as Traditional Birth Attendants, Peer educators, Community Health Workers as well as Caregivers for example Bwafwano Project. These conduct education and also target couples to sensitize them on PMTCT. The media has not been widely used but it was in the action-plan for MTCT secretariat by July 2000 to utilize media services to sensitize, teach people on PMTCT. Currently only Radio Chikuni is used for MTCT programmes. It has been found to be an effective means of communication as some people have readily responded by seeking VCT and more information on PMTCT. (Mukuka and Siyandi, 1999).

Through the various organizations as well as the cooperating partners in collaboration of MOH/CBOH was hoped that this will help reduce MTCT of HIV infection.

1.2 STATEMENT OF THE PROBLEM

Despite all the measures by the Government of Zambia, Non-governmental organizations, Churches and Advocacy programmes on the media to prevent and reduce Mother to Child Transmission of HIV, the prevalence and incidence has continued to rise in Zambia.

The prevalence of HIV infection in antenatal mothers is extremely high in Zambia. While infection rates range from 6.8 to 14% in rural districts and 15 to 37% in urban areas, mother to child HIV transmission rate is estimated at 39.5% (NASTLP, Council Report, 2000). A Demographic study and HIV burden indicators done in 11 countries, of which Zambia was included, showed that the HIV prevalence rate in urban pregnant women was 30% (Dabis et al 2000).

**ENROLMENT AND SERVICE UTILIZATION CUMULATIVE DATA FOR
MTCT PROJECT SITE IN ZAMBIA. PERIOD MARCH 2000 – DECEMBER
2001**

	2000	2001
All ANC visits	68,397	57,872
1 st ANC attendance	24,606	20,895
Pre-test women	5,420	4,669
Tested women	3,525	3,043
Post-test women	2,425	2,095
Positive	960	813
Total HIV positive women	27.2%	26.7%

Source: MTCT Secretariat.

From the above table, for those that were tested and were HIV positive showed 27.2% in 2000 and 26.7% in 2001. Therefore, it can be deduced that these findings are similar to the Zambia high HIV infection prevalence rate of 20% and above among the pregnant women.

Women of childbearing age constitute nearly half of the 33 million adults currently living with HIV/AIDS worldwide. (Quinn,1996). About 6 of 10 new HIV infections are to women and newborns contract the virus from infected mothers. There are 6 HIV infected women for every 4 infected men in sub Saharan Africa. (UNDP,1993). In Africa, women now account for 55% of all new HIV infections as the AIDS epidemic grows, it is becoming clear that women are more vulnerable than men. (UNICEF,1995).

Mother to Child Transmission of HIV can occur during pregnancy, labour and delivery and during breast-feeding. During late pregnancy the rate of transmission of HIV is 5-10%, during labour and delivery it is 10-20% and during breast-feeding it is 10-20%. (de Cock et al, 2000).

The risk of a baby acquiring the virus from an infected mother in the absence of preventive measures ranges from 25-40% in the developing countries, whereas it ranges from 15-25% in the industrialized countries. The difference is due largely to feeding practices, breast-feeding now known to be a significant source of infection is more common and usually practiced for a longer period in developing countries, than the industrialized world. In Zambia, it is estimated that about 30-40% of infants born of women infected with HIV become infected themselves of the 400,000 deliveries per year. This is equivalent to about 30,000 new infections every year in Zambia. (NASTLP Council Report, 2000).

The adverse impact of AIDS on child survival is evident. Most of the 30-40% babies who become infected with HIV will develop AIDS and die within two years, although few survive past the age of five. An HIV infected child is likely to be immunocompromised and prone to many infections. Some of the opportunist infections will include chronic diarrhoea and prolonged fever for more than 1 month, failure to thrive, pneumocystis carinii pneumonia, generalized lymphadenopathy and severe oral or pharyngeal candidiasis. The many infections that may require constant admission prove to be a burden economically, psychologically and socially to the mother or caregiver. In addition to this, in the age of scarce resources such as human, material, the chronically ill child is unable to receive quality health care from health care providers.

A significant proportion of the other 60-70% of children who remain uninfected are at risk of becoming orphans. (UNICEF, 1999). MOH/CBOH, (1997) estimated that by the end of year 2000 in Zambia, more than 500,000 children will have lost their mother or both parents due to AIDS alone. By the year 2010 it is projected that the number of orphans will exceed one million.

This results to a tremendous strain on the extended families who are already economically deprived and the social system to provide the orphans with the needed care, resources and supervision has also broken down.

AIDS – specific child mortality is projected to increase from about 8 per 1000 live births in 1990 to 33 per 1000 live births in 2000. (NASTLP, 2000). The effects of the epidemic among children are serious and far-reaching AIDS has reversed years of steady progress in child survival and has doubled infant mortality rates in the worst affected countries.

Pregnancy leads to a number of physiological changes, such as the immune system where the IgG, IgA and IgM are decreased and therefore, there is an increased risk of infection. (Sellers, 1993). Women who are HIV positive and conceive are likely to have a miscarriage/abortion due to opportunistic infections and ill-health. They may fail to properly take care of their baby when born. Therefore the maternal bond will not be created or be lost. This has adverse effects on the child in later life, such as poor nutritional status, delayed mile-stones.

Due to the adverse repercussions on women and children, as a result of the risk of high rate of HIV infection, it is imperative that pregnant women are well versed with knowledge about PMTCT of HIV, so that they adopt positive attitudes and practices. The questions

the investigator is asking are “*Do pregnant women have adequate knowledge and positive attitudes to efficiently participate in prevention of mother to child transmission of HIV? Are there differences in knowledge, attitudes and experiences between urban and rural pregnant mothers?*”

1.3 FACTORS INFLUENCING THE KNOWLEDGE, ATTITUDE AND EXPERIENCES OF PREGNANT WOMEN TOWARDS PMTCT

1.3.1 SOCIO – CULTURAL AND ECONOMIC FACTORS

1.3.1.1 AGE

1.3.1.2 The older women are more likely to have more knowledge on PMTCT and be more willing to adopt attitudes and practices that will protect their unborn child as compared to the younger women. This is because the older women would have gained knowledge on PMTCT through Information, Education and Communication (IEC) during previous antenatal care services and also through discussions with other women during their interactions at the antenatal clinic and in the community.

1.3.1.2 PARITY

Women with more than one child may have more knowledge on PMTCT gained from health education given at the Antenatal clinic or through interaction with the other women. They may even readily opt for (VCT) to know their status in order to reduce or prevent HIV transmission for example optional feeding and safe sex. Whereas women pregnant for the first time may have only started their antenatal visit and would not be knowledgeable about PMTCT, and therefore may not see the need for VCT.

1.3.1.3 POVERTY

Women, who are of low socio-economic status may not have the access to information due to lack of affordability of radio, magazines or newspapers or may not even be literate to read about any information of PMTCT. They may also not seek trained Health Care Provider who would inform them about PMTCT due to lack of 'user fees'. This will in turn result to them having poor attitudes and experiences, and enhance the transmission of HIV to their babies. On the other hand, those women from a higher socio-economic status are likely to have information on PMTCT and be willing to adopt positive attitudes and good experiences due to easy accessibility and availability of information from the radio, journals, magazines, newspapers, and television. They would also be able to afford health care from trained personnel and be empowered to make decisions that will reduce the risks of HIV infection, as they will not be economically dependent on the males.

1.3.1.4 LEVEL OF EDUCATION

Women who are illiterate may find it difficult to assimilate information on PMTCT and not be able to change their attitudes as compared to women who have a high level of education. These will be able to understand information on PMTCT and which will in turn influence their attitudes.

1.3.1.5 BELIEFS

Culturally, women in marriage have to take up the subservient role and give allegiance and please their spouses at all times. Therefore, women with inadequate knowledge on PMTCT of HIV will see no reason to

change certain harmful and risky cultural practices such as dry sex, lack of safer sex as compared to those with more knowledge who would try to avoid all risky practices for the benefit of their babies.

“It is clear that women are more circumscribed in knowing their HIV status as they have to consult their husband or parents about wanting an HIV test and more likely to be blamed”. (Bond and Ndubani, (1999). A married women cannot make a decision on her own and will have to consult her husband, even matters pertaining to HIV testing despite her being willing to be tested, this is solely depended on her husband’s decision.

1.3.1.6 STIGMA / FEAR

Generally the community has a negative perception towards an HIV positive person in that such a kind of person is shunned. This person would be isolated, no one would want to eat or drink with her. Hence no one would want to be identified as positive or having transmitted HIV to a baby as this would be very shameful, an unforgivable sin and immoral. This will result to, pregnant women shunning any PMTCT activities due to fear of rejection and stigmatization by the family, neighbours and community as a whole, when HIV positive.

1.3.2 SERVICE RELATED FACTORS

1.3.2.1. ACCESSIBILITY OF SERVICES

Pregnant women will often have limited knowledge on PMTC, which in turn affect their attitudes in that to access for health care services they may have to walk very long distances particularly in the rural areas. Whereas in urban areas to go the nearest health centre for antenatal care it may require money for travel. Also due to few Health Care Providers most clients have to wait for a long time to be attended to or may end up spending the whole day at the health centre affecting their usual routine work. Another aspect is the health centre working hours, which are designed to meet the health centre routine work and not the client's needs. The antenatal clients are attended to usually in the mornings if the client decide to attend the clinic in the afternoon, they are not attended to but turned away to come at a later date. All these factors affect the pregnant women's accessibility of services and lead to inability to gain knowledge on PMTCT and develop attitudes that will reduce MTCT .

1.3.2.2 MATERNAL CHILD SERVICES

In most health centres, there is staff shortage, resulting to the Health Care Providers inability to render holistic care to the clients. Provision of IEC on topics like PMTCT may not be given a priority for the Health Care Providers as the staff may concentrate on the routine antenatal check up, just to clear the many clients.

The staffs' attitude may be poor or negative towards the clients e.g. breach confidentiality for those seeking VCT or may be judgmental towards those women seeking VCT. This may hinder the women from changing their

attitudes towards PMTCT. Where the Health Care Providers are welcoming, supportive and courteous to the clients, they will be more willing to know about PMTCT and adopt attitudes that will reduce PMTCT.

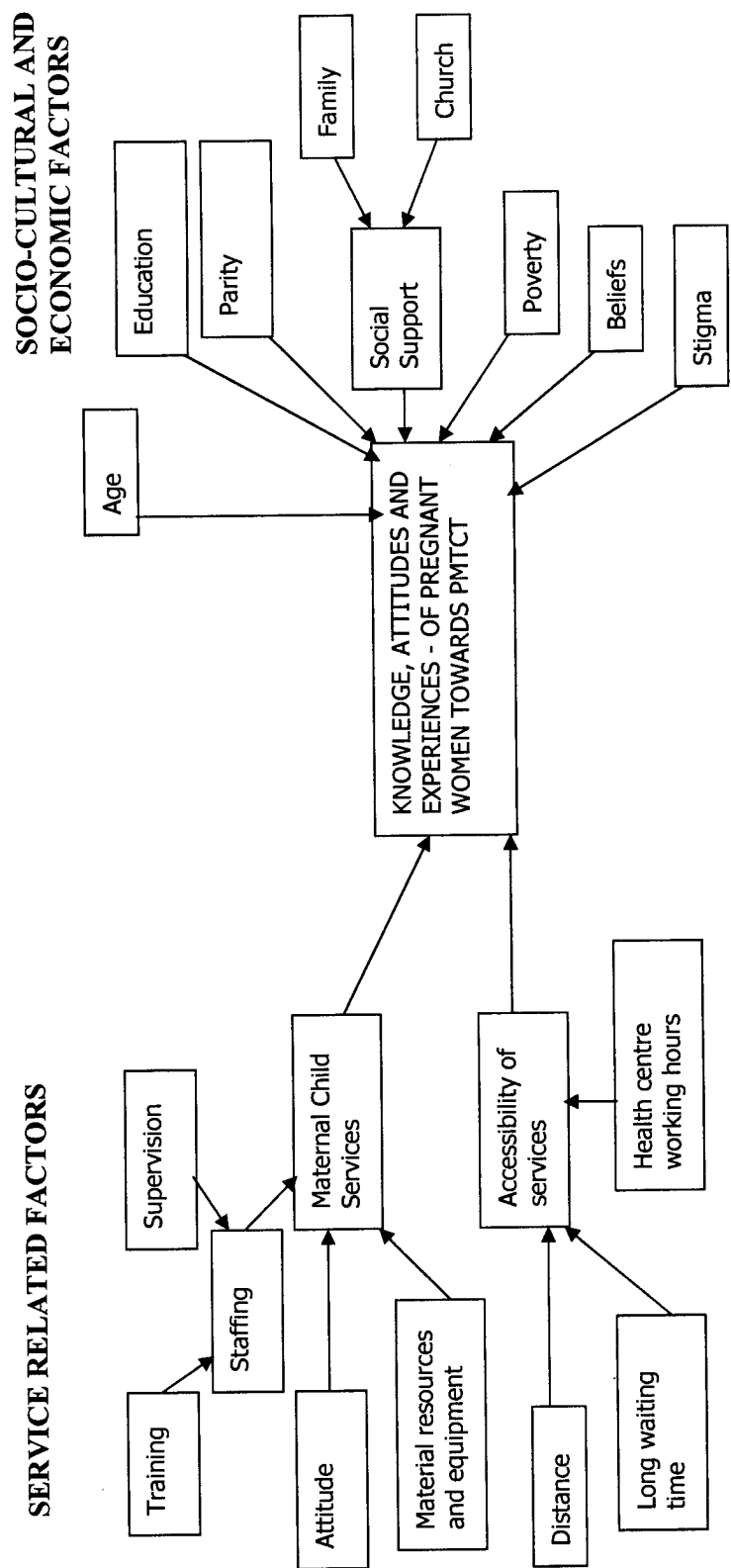
An additional factor would be lack of training of the Health Care Providers on PMTCT package or lack of skills for HIV testing and counselling. This will hinder them from educating the clients on PMTCT. Also non-availability of material resources such as HIV testing kits or needles, syringes may discourage the women from seeking an HIV test to know their HIV status in response to PMTCT.

1.3.2.3. SOCIAL SUPPORT

Pregnant women despite gaining knowledge on PMTCT may be hesitant to know their HIV status due to fear of lack of support from their family and relatives if their HIV status is positive. This is because generally, people who are HIV positive are not likely to get support from the family, community or even the church. They have often been blamed, identified as a reckless or a sinner in addition to this there are often no support groups or clubs, which will provide a holistic support for them. Where there is a good social support system particularly from the family and church, the pregnant woman who is HIV positive will quickly accept her HIV status and be more willing to adopt attitudes that will reduce MTCT.

1.4 PROBLEM ANALYSIS DIAGRAM

FACTORS THAT MAY INFLUENCE THE KNOWLEDGE ATTITUDES AND EXPERIENCES OF PREGNANT WOMEN TOWARDS PMTCT



1.5 JUSTIFICATION OF THE STUDY

The study will compare the knowledge, attitude and experiences of pregnant mothers attending an urban clinic with an MTCT center and those attending a rural clinic without an MTCT center. This will reveal areas that are strong and deficit in terms of care, IEC and teaching strategies.

It is hoped that this study will identify areas regarding the knowledge on PMTCT that need emphasis or adjustment so that the nursing fraternity can enhance measures on sensitization of PMTCT to women, spouses and society as a whole. The findings are also hoped to enable MOH, CBOH and NGOs to combine their efforts in finding strategies/interventions to reduce the increasing rate of MTCT. The finding will also assist policy makers in deciding whether to scale out the MTCT centers to rural areas.

1.6 OBJECTIVES

1.6.1 General Objective

To determine the knowledge, attitudes and experiences of pregnant women towards Prevention of Mother to Child Transmission of HIV.

1.6.2 Specific Objectives

1. To determine the knowledge of pregnant women on PMTCT of HIV.
2. To explore the attitudes of pregnant women on PMTCT of HIV.
3. To ascertain the experiences of pregnant women on PMTCT of HIV.
4. To determine factors contributing to PMTCT of HIV in pregnant women.

5. To identify areas for further research.

6. To make recommendations for implementation strategy and interventions.

1.7 HYPOTHESIS

1. The higher the knowledge pregnant women have on PMTCT of HIV, the more positive their attitudes.
2. Positive attitudes in pregnant women towards PMTCT of HIV lead to good experiences.

1.8 OPERATIONAL DEFINITION OF TERMS

- Knowledge:** Refers to information needed and acquired by the pregnant Women on Mother to Child Transmission of HIV.
- Attitude:** A mental view, opinion or disposition of the pregnant women towards Mother to Child Transmission of HIV.
- Experience:** Process of gaining knowledge or skill by participating in MTCT activities.
- Practice:** Actual performance or behaviour of the respondents towards the PMTCT of HIV infection.
- Maternal Care:** Care given to the pregnant woman from the time of conception up to 6 weeks in the postpartum period.
- Pregnant woman:** Is a woman who has conceived and has a growing fetus or unborn baby in her uterus.
- Mother:** Is a female parent or woman who is responsible for the care of her children.
- Child:** Is anyone below the age of 15 years old.
- Woman:** Any person who is in her childbearing age i.e. from 15-49 years old.
- Prevalence Rate of MTCT:** The existing cases of MTCT diseases.
- Incidence of MTCT:** The number of new MTCT cases of diseases.

PMTCT:

Avoiding HIV being passed from mother to child in the womb, during child birth or through breast- feeding.

VARIABLES AND CUT OFF POINTS

VARIABLES	CUT OFF POINTS	INDICATOR	QUESTION NUMBER
1. KNOWLEDGE	HIGH	Responses to questions with scores 13 – 17.	9 – 15
	MEDIUM	Responses to questions with scores 7 – 12.	9 – 15
	LOW	Responses to questions with scores 0 – 6.	9 – 15
2. ATTITUDE	POSITIVE	Responses to questions with scores 6 – 10.	17, 19, 22, 24 – 27
	NEGATIVE	Responses to questions with scores 0 – 5.	17, 19, 22, 24 – 27
3. EXPERIENCES	GOOD	Reception very good, confidentiality and privacy.	29, 30, 32, 34
	POOR	Reception is poor, no confidentiality or privacy.	29, 30, 32, 34

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

Mother to Child Transmission of HIV has become a critical child health problem in Africa, contributing to severe child morbidity and significant child mortality, undermining the impact of programs that have significantly reduced child mortality in previous decades such as campaigns on breast-feeding and immunizations.

MTCT is by far the largest source of HIV infection in children below the age of 15 years. Nine out of ten of all HIV-infected babies globally live in Africa which accounts for only 10% of the world's population. MTCT of HIV occurs during pregnancy, childbirth and breast-feeding. The risk of a baby acquiring the virus from an infected mother in the absence of preventive measure ranges from 25% to 35% in developing countries (UNAIDS, 1999).

The increasing number of infected women of the child bearing age makes the prevention of MTCT a public health priority particularly in African countries where antenatal HIV seroprevalence ranges between 5 and 40% (UNICEF, 1999).

The increasing number of infected women means that there is likely to be an increase in the morbidity and mortality pattern of children. The impact of MTCT results to the death of the mother or both parents. According to MOH/CBOH report, 1997, it states that in Zambia, currently there are 650,000 orphans due to HIV/AIDS and it is projected that by 2010 they are likely to be more than 1 million orphans. This shows the magnitude of severity of problem of MTCT of HIV in Zambia. Literature has been discussed under Global, Regional and Local perspective looking at studies on knowledge, attitudes and experiences, as well as

other factors affecting the three (3) variables in the pregnant women towards Mother to Child Transmission of HIV.

GLOBAL PERSPECTIVE

MTCT of HIV is an urgent planetary emergency and a worldwide human tragedy. At least 90% of all HIV infections in children are a result of MTCT. It has been estimated that 4.5 million infants have been infected since the beginning of the epidemic. 3 million have already died and 600,000 new infections occur annually and 1 million are living with HIV today. (Acta Pediatric, 2000).

Shaffer et al (1999) conducted a study on "*the impact of HIV on children in Bangkok, Thailand*", he found that Thailand has widely established voluntary counselling testing in the health care system. For many years, pilot studies have shown the successful acceptance of VCT. Pregnant women attending antenatal care services have been given the absolute right to choose whether to be tested or not coupled with VCT is the provision of free anti-retroviral drugs to the pregnant women.

Thailand has shown a reduction of HIV prevalence rate in pregnant women to 5% in the urban area as compared to countries in sub-Saharan Africa which is 30%. From this study it was elicited that all pregnant women who attend antenatal care services are given information on PMTCT and VCT is offered. Many women have increased knowledge and responded to VCT hence respond to measures to reduce MTCT of HIV infection. In 1998, the Brazilian AIDS programme and Ministry of Health reported that after 18 months of a National Programme to provide antiretroviral therapy, the number of women participating remained low. This was attributed to deficiencies in maternal and infant care due to overloaded health services, a pattern of interventionist assistance during delivery, and lack of training and

knowledge of HIV/AIDS between Maternal and Child Health Care Providers (HCP). Santos V. et al, (1998). It is vital that HCPs' are familiar with the PMTCT Health care package to sensitize the women as they seek MCH services. This will enhance the knowledge of the women and enable them to make better choices concerning VCT for their benefit and the baby.

India has the largest number of HIV positive individuals in the south east Asia region. Sexual transmission is estimated to account for nearly 84% of HIV infections and perinatal transmission for 2.04% (NACO, 2001).

A pilot research initiative study was done in India in 2001 i.e. Mumbai, the HIV prevalence among women attending antenatal care estimated between 2.5-3.75%. Motherhood is perceived as the ultimate validation of womanhood, women found to be HIV positive were highly stigmatized and blamed for passing the infection to the unborn baby and this was highly accentuated if the child was a male – due to the high importance awarded to male children. Women found to be HIV positive in their first trimester were coerced to undergo medical termination of pregnancy by health workers. This deprived them from making an informed choice.

Also, there was routine blood testing for HIV for all pregnant women, whether pre-counselled or not. Those that had been pre-counselled felt obliged to consent for HIV testing due to fear of refusal by health workers to deliver them. In relation to reducing MTCT, pregnant women were advised to practice safer sex through use of condom or abstinence. Women had no authority to make pertinent decisions about sexual practices but depended on their husband's decision. On issues of infant feeding, those found to be HIV positive were advised to refrain from breast-feeding but to boil the breast milk. In some instances boiling

of milk prior to feeding was practiced but due to the women's low socio-economic status many depended on breast-feeding i.e. they did not have resources to boil the milk all the time prior to feeding. (PANOS INSTITUTE, UNICEF, 2001).

From this pilot research study, the pregnant women were not given adequate knowledge on MTCT as there were no VCT services, routine blood testing for HIV in all pregnant women impinged on their rights. Health workers attitude towards the women infected with HIV hindered them from making informed decisions on practices to reduce MTCT.

Another pilot research study done in the Ukraine in 2001, pregnant women who were HIV positive were referred directly to an AIDS Centre or specialized Antenatal Care Department for HIV infected people for further care. Pregnant women who were HIV positive were assumed to have led immoral lives and were labeled as prostitutes or having extramarital affairs. This perpetuated the stigmatization.

It was also found that Health workers enhanced the stigmatization of the pregnant women who were HIV positive as they failed to maintain confidentiality and disclosed the HIV status without their consent to other people in the community. This resulted to the women shunning the health care services. As they feared to be faced with extreme forms of abuse, rejection and abandonment. At times, the Health workers refused to attend to pregnant women who were HIV positive and for those who were attended to, the Obstetrician conducted termination of pregnancy without the womens' consent. Blood for HIV testing was routinely done for all pregnant women without precounselling and for those who were positive, antiretroviral drugs were administered.

In relation to breast-feeding, there was no evidenced stigmatization of those women who did not breast-feed due to their HIV positive status as Ukraine has a culture where women generally do not breast-feed their babies much. (PANOS INSTITUTE and UNICEF, 2001).

In this study pregnant women were deprived of Information, Education and Communication on PMTCT and voluntary counselling testing for them to make an informed decision concerning their reproductive health. Health workers' poor attitude also greatly contributed to the stigmatization of those who were HIV positive.

REGIONAL PERSPECTIVE

Although Africa accounts for only 10% of the world's population, to date around 9 out of 10 of all HIV infected babies have been born in Africa as a result of high fertility rates combining with high infection rates. The epidemic in urban centres in the southern Africa e.g. rates of HIV infection of 20-30% among pregnant women have been reported.

In Burkina Faso, a pilot study was done in 2001 to explore the complexities of the stigma related to MTCT. It was found that there was no specific MTCT programme or VCT initiative in the town under study (Koudougou) except in the bigger cities. This resulted to issues of MTCT not being discussed in health care settings except a few elements on aspects of HIV and its prevention. HIV testing whenever done was with consent of the pregnant women and Health Care Providers were known of breaching confidentiality, thus increasing stigmatization. Many women were hesitant to undergo an HIV test due to fear of abandonment by the spouses and the communities at large. Women from the affluent background were more willing to take the HIV test as compared to those of lower status. The pregnant women did not see the value of being tested as the antiretroviral drugs were very expensive – they preferred not to know their HIV status. Aspects of safer sex were not

discussed. Although the women had heard that an HIV positive mother could infect the baby through breast-feeding, they preferred to continue breast-feeding as access to milk substitutes was prohibitively unaffordable. The health workers rarely discussed options of infant feeding, mainly due to lack of knowledge. (PANOS INSTITUTE and UNICEF, 2001). From the study, if there is no established MTCT programme and VCT for pregnant women, it hinders them from making the informed choices which will help to reduce MTCT. Again, it is important that health workers are trained and conversant with issues pertaining to PMTCT.

In 1995-1996, a study was conducted in Abidjan and Bobo Dioulasso to find out the overall acceptability of voluntary HIV counselling and testing, which was found to be relatively high. Of the 5,700 pregnant women in Abidjan and 4,000 in Bobo Dioulasso, 78% and 92% respectively accepted an HIV test and 58% and 82% respectively returned for the results. (Cartoux M. et al, 1998).

Msellati et al (1998) conducted a study in Abidjan to ascertain the acceptability of pregnant women to VCT of the 4309 pregnant women, 3756 benefited from individual counseling and pretesting i.e. 87.2% agreed to be tested. VCT in view of reducing MTCT was well accepted by pregnant women for those that were HIV positive, alternative feeding options were proposed to them as well as active follow up of the children together with social and nutritional support. It was also found that the current perception by HIV positive women of their risk, stigmatization was associated with the use of services designed for PMTCT. It is important for the MTCT programme to be integrated in the already established antenatal services to reduce stigmatization of those clients who are HIV positive.

A report presentation at the 13th International AIDS Conference in July 2000 in Durban society for women (SWAABO) and the International Centre for Research on Women

(ICRW) discussed findings on a study. In Botleng, Botswana, the pregnant women and also the role of men in influencing women's decisions to participate aimed the study at ascertaining the reason for utilization of MTCT programme. Men were found to have strong influence over a woman's decision to participate in MTCT programme. Many men believed that breast-feeding was natural and expressed negative attitudes towards women who did not breast-feed, assuming that this would indicate that the woman is HIV positive.

Another presentation at the Durban conference, by Ro K. Kantona, on the findings of the study done in Gaborone, study on womens' perspectives on PMTCT. It was found that the women were more knowledgeable than men on MTCT. The women generally were afraid of HIV testing in that if the results came out positive, they would be stigmatized, rejected by their spouses and community. The women felt they should first consult their partners before getting tested. They were also skeptical about maintaining confidentiality by Health Care Providers. Men and other community members influence women's decisions.

In both studies done in Botswana, it shows the influential role men have in the role of decision-making concerning the women. It becomes very difficult for the women to make informed choices about their reproductive health due to their vulnerability and dependence on the men.

Misihairabwi et al (1997) conducted a Qualitative study in Zimbabwe, which asked HIV positive women how they felt about transmitting HIV to their infants, it was found that they considered both breast-feeding and the prevention of transmission of HIV to their babies important. They also felt that it was up to the individual to make an informed choice on the method of feeding. On the other hand, women were reluctant to resist pressure to breast-feed because it might lead to disclosure of actual or the feared HIV status. Mothers of children who were HIV positive expressed great regret that they had not bottle-fed their infants.

Another study on acceptability of voluntary counselling testing among pregnant women in Zimbabwe (1998) showed that many clients do not return for the HIV test results after blood has been taken. A review of the July to December 1997 counselling book records showed that 14 clients were advised to have the HIV test. 11 of these attended counselling sessions and were tested but only 2 of them returned for their results. 10 of the 11 results were actually HIV positive. This either suggests that the counselling was of low quality as the women seemed to be knowledgeable about MTCT and measures to reduce it or women were afraid of being stigmatized. (A Zimbabwe Situation Analysis Report, 1998).

Acquisition of knowledge is supposed to bring to change in behaviour but this was not the case in the situational Analysis in Zimbabwe. Despite pregnant women having knowledge on MTCT very few were willing to know their HIV status. Perhaps the low quality of counselling contributed but needs to be explored further.

Des Fransman (1999) conducted a cross-sectional in Khayelitsha (Cape Town) South Africa of 200 pregnant women and 100 postnatal women. The study was aimed at determining the womens' perception, attitude and behaviour towards MTCT intervention program and VCT of HIV testing. Most of the respondents i.e. 94% had agreed to HIV testing those that refused the test did not want to know their HIV status. Most of the respondents had received individual pre-test counselling. The clients did not feel coerced by the clinic staff to take HIV test but it was their own free will. Most of them were in favour of taking antiretroviral drugs should they require it. Individual pre-testing counselling was more preferable than group counselling.

NATIONAL PERSPECTIVE

The prevalence of HIV infection in antenatal mothers is extremely high in Zambia. While infection rates range from 6.8 to 14% in rural districts and from 15 to 37% in urban areas, Mother to Child HIV Transmission rate is estimated at 39.5%. As a result, every year between 20,000 and 30,000 infants become HIV infected. In response to this critical situation, in June 1998 the Ministry of Health appointed a National PMTCT working Group which is mandated to spearhead technical assistance to the implementation of a PMTCT pilot project which has been instrumental in developing PMTCT project proposal and provision of services since mid 2000. The high prevalence rate of HIV infection among women of child bearing age denotes the importance of women having knowledge on MTCT and taking up measures to prevent and reduce MTCT of HIV.

Ndubani, P and Bond, G. (1999) conducted a Formative Research in Keemba, Monze in the Southern Province. It was a qualitative study which was aimed at assessing the perspectives of women and their communities about MTCT of HIV, VCT, treatment and breast-feeding options. It was found that the community as well as the women were well informed about MTCT. Many women were not keen to under go VCT and HIV testing as this would result to stigmatization and rejection by their spouses and community at large. Women who would not breast-feed were seen as promiscuous and wanting to have a sexual affair with another man by the community. It was also found that there was no HIV testing done due to fear of stigma, depression, suicide and marital problems by the women in particular.

Other Pilot project Studies conducted by PANOS INSTITUTE/UNICEF in 2001 in rural Zambia about 170 km south of Lusaka. The specific area where the research was done is not

sited. The study was aimed at assessing and providing an initial analysis of the extent of perceived and enacted stigma surrounding MTCT.

It was found that in areas where there were MTCT programmes issues pertaining to MTCT of HIV infection was a component of IEC during provision of antenatal services, in this study, the Health Care Providers did not routinely give IEC on MTCT to the antenatal mothers. It was also discovered that at a mission hospital with a comprehensive MTCT programme with VCT and Antiretroviral therapy in the area where research was conducted, the uptake of the intervention by the pregnant women was considered to be low. Women who were known to be HIV positive were highly stigmatized and worse still if they were pregnant. Due to the stigmatization attributed towards HIV testing, many women were not keen to undergo VCT and HIV testing.

Pertaining to options on infant feeding for an HIV positive mother there were mixed messages, some felt it was important not to breast-feed at all, whereas others thought otherwise. It was also stated that an HIV positive mother who did not breast-feed was seen to be disclosing her HIV status to the public and would be labeled as having evil intentions such as promiscuity. Due to fear of being stigmatized most women chose to continue to breast-feed whether they knew their status or not.

It was also found that in areas where there were MTCT pilot programmes women felt that they were well treated as compared to areas where there were no MTCT programmes. In the studies done in rural Zambia, despite women being knowledgeable about MTCT and intervention methods, there is a lot of stigmatization attached to those who were HIV positive. It also showed that the community had a great influence on the woman's decision concerning VCT and HIV testing.

CONCLUSION

A review of literature has indicated that there have been studies conducted worldwide to assess the perceptions of pregnant women towards MTCT. In most settings where there were MTCT pilot programmes women were found to be knowledgeable about MTCT and the measures to try and reduce it.

The bone of contention remained on their attitudes and practices from the knowledge on PMTCT, which were mainly influenced by the community, Health Care Providers and indeed their spouses.

Many women who had undergone VCT and HIV testing were hesitant to go back for their results, due to the attributed stigmatization of those who were HIV positive. In terms of feeding options the women kept receiving mixed messages from the Health Care Providers and for those who had the knowledge, had no capacity to make informed choices due to fears of being ostracized by the family and community at large.

Literature review has shown that not many studies have been done in Zambia concerning knowledge, attitudes and experiences of pregnant women towards MTCT.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

The purpose of this study is to determine the Knowledge, Attitude and experiences of pregnant women towards PMTCT of HIV infection. To achieve this, a non-intervention cross-sectional, descriptive comparative quantitative research design was used. A combination of these methods of the research study were used because these methods are more effective in finding out the nature of the problem more accurately and the possible influencing factors. It also helped describe the phenomena of interest and assemble new information about the subjects.

3.2 RESEARCH DESIGN

Research design, “refers to the researchers’ overall plan for obtaining answers to the research questions or for testing research hypothesis”. (Polit and Hungler, 1997). The research design is a guide for the investigator which was used as a framework for the research process. The study was a Non-Interventional, cross-sectional, descriptive comparative quantitative research design.

A Non-Interventional design is “the researcher just describes and analyzes researchable objects or situations but does not intervene”. (Varkevisser, et al,1991). It was a non-interventional study because the investigator neither introduced any interventions in form of treatment nor had any control groups. Also the study was carried out in a natural setting and the phenomena was observed as it occurred.

A Cross-sectional design is “a study based on observations of different age groups or developmental groups at a single point in time for the purpose of inferring time – related changes”. (Polit, and Hungler,1997). It was a cross-sectional study because the observations of the variables in the study population was conducted at one point in time.

A descriptive study “involves the systematic collection and presentation of data to give a clear picture of a particular situation”. (Varkevisser, et al,1991). The study was descriptive as it involved collection and presentation of data about knowledge, attitude and experiences of pregnant women towards PMTCT of HIV in a systematic manner. In addition, it described what exists about the phenomena and also gave a clear picture of the situation.

Comparative Design is “a method in which results from two different groups or techniques are compared”. (Treece, and Treece, 1986). The study was comparative because it looked at similarities and differences in the knowledge, attitude and experiences of pregnant women towards PMTCT of HIV, in an urban area with an MTCT centre and rural area without an MTCT centre.

A Quantitative Design is, “a method in which the study variables are preselected and defined by the investigator and the data are collected and quantified (that is, translated into numbers) then statistically analyzed often with a view to establishing cause – effect relationships among the variables”. (Dempsey and Dempsey, 2000). It was a quantitative study because the answers or the findings of the study was categorized and quantified in numeric form.

3.3 RESEARCH SETTING

Research setting is an area or site where the research was conducted. The study will be conducted in two places that is the urban and rural area for comparative reasons. In the urban

area it was conducted in Lusaka at the University Teaching Hospital (UTH). The University Teaching Hospital is the major referral centre in the nation and it is located about 4-5 km south west of Lusaka City Centre. It was officially opened in 1979 by the then Republican President Dr. D.K. Kaunda. UTH has a bed capacity of 1700 and consists of ten (10) nursing departments as well as supportive departments such as laundry, kitchen, laboratories, radiography, records etc.

The study was conducted in Ward BO2, which caters for Maternal Health services. The services it provides include antenatal, postnatal, family planning and gynaecological services. Currently in Ward BO2 there is a programme on PMTCT of HIV. Ward BO2 was chosen purposively, it offers antenatal, postnatal, family planning and gynaecological services.

In the rural area, the study was conducted at Chikankata Mission Hospital and two (2) Outreach Health Posts within Chikankata catchment area. Chikankata catchment area is situated between Gwembe and Kafue valley about 130 km south west of the capital of Lusaka within Mazabuka District.

The hospital has eight (8) nursing departments and it caters for laundry, kitchen, laboratory radiology, and health information system services. The study sites were conveniently chosen that is the Maternal Child Health (MCH) unit at the Mission Hospital and also Malala Health post, which is located 26 km, as well as Goodson Farm Health Post situated 45 km from the hospital. Convenient sampling was chosen due to the limited resources.

In these sites, safe motherhood activities e.g. antenatal, postnatal and family planning are done. Currently there is no pilot project on PMTCT of HIV in Chikankata.

3.4 STUDY POPULATION

Study population is an “entire number of units under study (the whole)”. (Treece and Treece, 1986). The target population, “is the entire population in which the researcher is interested in”. Polit and Hungler, (1997). The target population were all pregnant women who were physically fit at UTH and Chikankata Mission Hospital, in the age group of 15-49 years old despite their parity.

- The accessible population, “refers to those cases that conform to the eligibility criteria and that are accessible to the researcher as a pool of subjects for the study”. (Polit and Hungler, 1997). The accessible population comprised all pregnant women who attended antenatal services at BO2 (antenatal clinic) at UTH and MCH department at Chikankata Mission Hospital, as well as Malala and Goodson Farm in Chikankata.

The pregnant women were selected for this study due to their vulnerability, and the high risk of passing HIV infection (perinatal transmission) to the baby, when they are HIV positive.

3.5 SAMPLE SELECTION

Sample selection, “Is a process of selecting a portion of the population to represent the entire population”. (Treece and Treece,1986). In order to obtain a representative sample of the population selected for the study, the sample was obtained from the target population.

The sample size was 60 respondents, this size was selected because of the limited time given to conduct and complete the study and submit the report. The respondents were chosen by

simple random sampling which is the most basic and simplest of all probability sampling design methods using the lottery method. The 60 respondents were then divided into 30 respondents from ward BO2, UTH and another 30 respondents from MCH centres in Chikankata. Simple random sampling with replacement was used so that all the respondents had an equal and an independent chance of being selected each time. Simple Random Sampling with Replacement, "is where an element which has been selected can appear twice in a sample. The drawn element is placed back among other elements of the population". (Bless and Achola,1988).

The investigator wrote numbers from 1-50 on pieces of papers. There was no sampling frame. The papers were put in a box, which was shaken vigorously and the investigator explained to the women that all those who picked odd numbers were co-opted into the study, i.e. 1, 3, 5, 7, 9, 11, 13, 15.....50.

The investigator and her research assistants interviewed each day about 10-12 respondents each day. The interviews took approximately 30-40 minutes for 3-5 days. The interviews were conducted after the routine antenatal check up, to avoid inconveniencing the respondents.

3.6 SAMPLE SIZE

A sample is "a subset of a population selected to participate in a research study". (Polit and Hungler,2000). A sample of 60 respondents were chosen for the study i.e. 30 respondents from Chikankata Mission Hospital and another 30 respondents from UTH. The researcher decided upon this number because it was manageable considering the limited time in which the study was to be done.

3.7 DATA COLLECTION TOOL

Data collection, "is gathering of information needed to address a research problem". (Polit and Hungler, 2000). To facilitate data collection a structured interview schedule was used. Interview schedule is 'a standard questionnaire which contains all the study variables on which data to be collected was used. The questionnaire contained (4) four sections, section A contained Demographic information, section B, Knowledge items, section C – Attitude items and section D – Experiences of pregnant women.

3.8 DATA COLLECTION TECHNIQUE

This is a procedure of collection of data information needed to address a research problem (Polit and Hungler, 2000). The first step was getting permission from the facilitator at the Post Basic Department then from the Executive Directors from both U.T.H and Chikankata. This was followed by permission from the Area Nursing Officer and Sister In Charge from the Maternal Child Health departments at both institutions. Verbal consent was obtained from respondents at each interview session. The purpose of the study was explained to the pregnant Women. The information collected was strictly confidential and no names were included. The interviews were conducted in a room where privacy was observed at both sites. The interviews took about 25 – 35 minutes for each respondents.

The structured interview schedule also comprised series of questions that were both open and closed ended. The structured interview is preferred to other methods of data collection as it is suitable for both literate and illiterate respondents. It is anticipated that questions raised by respondents will be clarified during the interview. Also in-depth responses are likely to be

obtained as the investigator can pursue any questions of special interest. Non-verbal (cues) behaviour, and mannerisms were observed during the interview.

The interviewer was mindful of the possible disadvantages of a structured interview schedule such as the Hawthorne's effect. It is time consuming and requires that research assistants be trained. Therefore, it is important that during the period of data collection, the investigator is patient and ready to persevere to obtain the intended information.

3.9 PILOT STUDY

A pilot study is "a small-scale study which is conducted before the main study on a limited number of subjects from the same population as that intended for the eventual project". (Blink,1996).

A pilot study was conducted at UTH in the antenatal/postnatal wards. The wards were conveniently selected. The sample size of 6 respondents were interviewed only those respondents who were well but admitted for high risk or recovered and awaiting for discharge were interviewed. The 6 respondents were selected by simple random sampling. The pilot study was done to test the validity and reliability of the data collection instrument in order to detect and solve unforeseen problems or flaws .Also to test the data collection technique or procedure.

The following adjustments were made to some of the questions:-

- Two (2), (1) Knowledge and (1) Attitude question had another option included on the alternatives.
- Two (2), (1) Knowledge and (1) Attitude questions were rephrased. One (1) was removed as it was ambiguous and irrelevant.

3.10 VALIDITY

Validity, “is the degree to which an instrument measures what it is intended to measure”. (Polit and Hungler,1997) .Validity was measured, by ensuring that the same questions were asked to each research subject in the same sequence. Also a Homogenous sample was obtained as it has similar characteristics for example (all pregnant women). The researcher conducted a pilot study to test for construct validity.

3.11 RELIABILITY

Reliability is “the stability of a measuring instrument overtime, concerned with consistency, stability and repeatability of the informants accounts as well as the investigating ability to collect and record information accurately”. (Blink, 1996). To ensure reliability, the same method of data collection was used through the use of the same instrument. The researcher ensured that formatting of the questions was done and the questionnaire was divided into 4 sections to study each variable, Demographic data, knowledge, attitude and experiences of pregnant women.

3.12 ETHICAL AND CULTURAL CONSIDERATION

Ethics can be defined as, “a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants”. (Polit and Hungler,1997).

A brief explanation on the nature and purpose of the study was given to the respondents in order to obtain consent before interviewing them.Those who did not give consent never

participated in the study. Confidentiality and anonymity was assured to the respondents in that no names appeared on the answer sheets. The respondents were found in a natural setting, that is the antenatal clinic, hence they were not exposed to any physical or emotional danger or harm.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

The purpose of the study was done to determine the Knowledge, Attitudes and Experiences of pregnant women towards Prevention of Mother to Child Transmission (PMTCT) of HIV in both the Rural (Chikankata) and the Urban (U.T.H). This chapter discusses data analysis and presentation of findings. Data was collected by the use of a structured Interview Schedule questionnaire. A total of (60) sixty Pregnant Women were randomly selected and interviewed.

4.2 DATA ANALYSIS

Data analysis, “ is the process of carefully scrutinizing, information collected by placing it in categories, calculating the mean and applying statistical procedures.” (Treece and Treece, 1986). After data was collected, it was sorted out and edited for internal consistency, completeness and accuracy. All responses to closed –ended questions were coded using numbers and open- ended questions were categorized into different groups and codes.

Data was processed manually and entered on the Master Sheet. It was analysed using a calculator. The exercise included Frequency Counts, Percentages, Bar Charts and Pie Charts. Cross tabulations of Variables was done to show relationships among variables and to draw meaningful inferences from the sample.

4.3 PRESENTATION OF FINDINGS

Charts, Frequencies and Cross- tabulations were used to present data. These methods were used because they summarise the results in a meaningful way and enhance understanding of the findings to the readership, in relation to the intentions of the study.

TABLE 1: DEMOGRAPHIC DATA OF RESPONDENTS

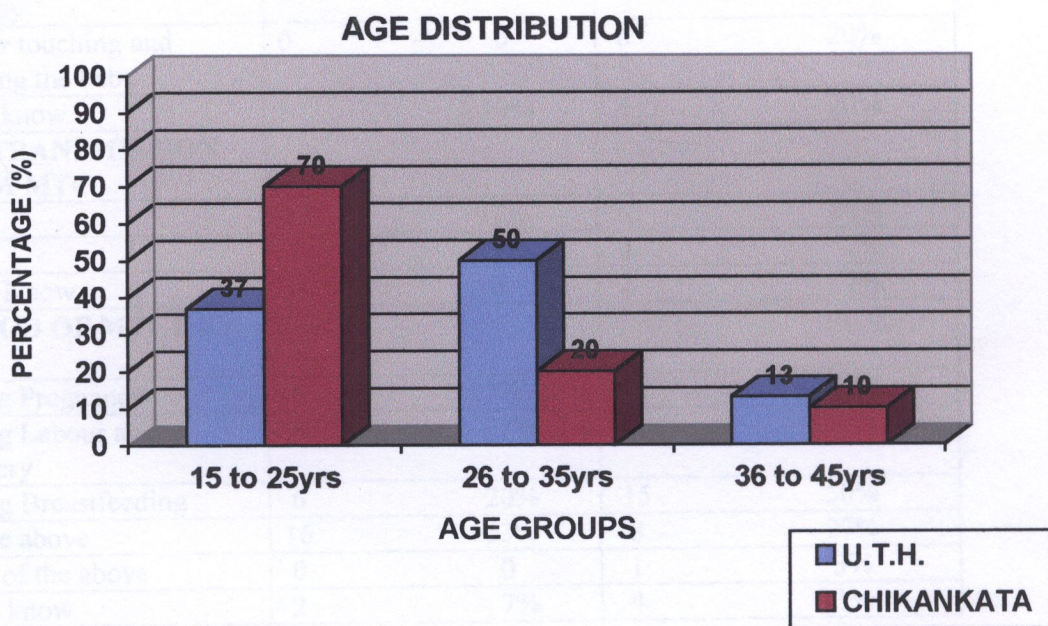
(n = 60)

VARIABLE	U.T.H		CHIKANKATA	
	Frequency	R.F	Frequency	R.F
MARITAL STATUS				
Single	1	3%	3	10%
Married	27	90%	27	90%
Separated/ Widowed	2	7%	0	0
TOTAL	30	100%	30	100%
EDUCATIONAL LEVEL				
None	1	3%	3	10%
Primary	8	27%	22	73%
Secondary	14	47%	5	17%
College	7	23%	0	0
TOTAL	30	100%	30	100%
RELIGION				
Christian	28	93%	29	97%
Non – Believers	2	7%	1	3%
TOTAL	30	100%	30	100%
OCCUPATION				
Housewife	17	57%	17	57%
Business	6	20%	4	13%
Self – employed	0	0	6	20%
Formal –employment	7	23%	3	10%
TOTAL	30	100%	30	100%
PARITY				
None (0)	11	36%	10	33%
One (1)	8	27%	7	24%
Two (2)	4	13%	4	13%
Three (3)	2	7%	3	10%
Four (4)	3	10%	3	7%
Five and above	2	7%	4	13%
TOTAL	30	100%	30	100%

90% in both U.T.H and Chikankata study groups were married.47% of the U.T.H group had attained Secondary education where as 73% from Chikankata had attained Primary education. 93% and 97% from U.T.H and Chikankata were Christians respectively.57% were

93% and 97% from U.T.H and Chikankata were Christians respectively. 57% were Housewives from U.T.H and Chikankata and only 23% were in formal employment. 36% from U.T.H and 33% from Chikankata were Primigavidae.

CHART 1: AGE DISTRIBUTION



50 % of the respondents from U.T.H were aged between 26 – 35 years and 70 % from Chinkankata were aged between 15 – 25 years

KNOWLEDGE

TABLE 2: CORRECT RESPONSES ON KNOWLEDGE ITEMS
(n = 60)

VARIABLE	U.T.H		CHIKANKATA	
	Frequency	R.F	Frequency	R.F
HIV /AIDS TRANSMISSION				
Sexual Intercourse	30	100%	28	93%
Infected blood products	23	77%	20	67%
Mosquito bites	5	17%	9	30%
Breast milk to babies	16	53%	22	73%
Contaminated razor blades / needles	25	83%	24	80%
Sharing bathrooms/ Toilets	4	13%	6	20%
Don't know	1	3%	2	7%
DEFINITION OF MTCT OF HIV				
Transmission of virus from Mother to child	27	90%	17	57%
Giving herbal medicine to the baby	0	0	1	3%
Mother touching and cuddling the baby	0	0	6	20%
Don't know	3	10%	6	20%
HIV TRANSMISSION FROM MTC				
Yes	29	97%	26	86%
No	1	3%	2	7%
Don't Know	0	0	2	7%
PERIOD OF MTCT BY HIV				
During Pregnancy	5	17%	13	43%
During Labour and Delivery	8	27%	2	7%
During Breastfeeding	6	20%	15	50%
All the above	16	53%	8	27%
None of the above	0	0	1	3%
Don't know	2	7%	4	13%

TABLE 2 (Continued)

VARIABLE	U.T.H		CHIKANKATA	
TREATMENT GIVEN TO HIV(+) MOTHERS TO PMTCT OF HIV				
Antibiotics	2	7%	1	3%
ARV drugs	16	53%	6	20%
Don't Know	12	40%	23	73%
SIDE EFFECTS OF ARV DRUGS				
Anaemia /G.I.T upset / Headache	3	10%	0	0
Don't know	27	90%	30	100%
HOW TO REDUCE MTCT OF HIV				
Exclusively breastfeed for 4 – 6 months then stop abruptly	7	23%	9	30%
Not to breastfeed at all	19	63%	11	37%
Mixed Feeding	1	3%	6	20%
Prevent breast problems i.e. mastitis, cracked and bleeding nipples	7	23%	10	33%
All the above	1	3%	1	3%
Don't know	6	20%	11	37%

Shows that all the respondents from U.T.H and 93% from Chikankata knew that HIV/ AIDS is transmitted through sexual intercourse. 73% of the respondents from Chikankata knew that HIV could be transmitted through breast milk compared to only 53% from UTH where there is an MTCT centre. 30% of the respondents from Chikankata thought mosquito bites could transmit HIV as compared to 17% from UTH.

90% from UTH knew the definition of MTCT OF HIV in comparison to, only 57% Chikankata respondents. 97% from UTH and 86% from Chikankata knew that HIV is transmitted from Mother to Child (MTC). 53% of the UTH respondents knew when MTCT of HIV occurs as compared to only 27% in Chikankata.

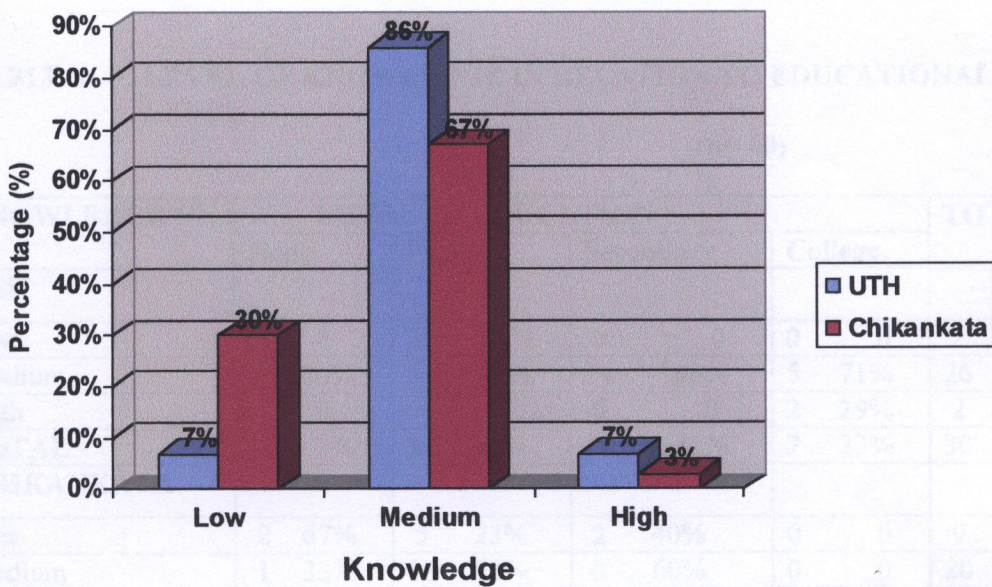
53% from UTH knew the treatment given to HIV positive Mothers to PMTCT of HIV as compared to only 20% in Chikankata. 53% of the respondents from UTH knew the treatment given to HIV positive Mothers to PMTCT of HIV as compared to only 20% in Chikankata. 90% from UTH and All respondents from Chikankata did not know the side- effects of Anti-retroviral (ARV) drugs.

63% from UTH and only 37% from Chikankata stated that to reduce MTCT of HIV there should be no breastfeeding, whereas 26% from UTH and 60% from Chikankata did not know or gave an incorrect response on how to reduce MTCT of HIV.

GRAPH 2

LEVEL OF KNOWLEDGE

(n = 60)



30% of the respondents with low level of knowledge were from Chikankata while only 7% were from UTH. Majority of the respondents 86% from U.T.H and 67% Chikankata had medium level of knowledge.

TABLE 3: LEVEL OF KNOWLEDGE IN RELATION TO AGE

(n=60)

KNOWLEDGE	AGE						TOTAL	
	15 – 25		26 –35		36 - 45			
UTH								
Low	1	10%	1	7%	0	0	2	7%
Medium	10	90%	13	86%	3	75%	26	86%
High	0	0	1	7%	1	25%	2	7%
TOTAL	11	37%	15	50%	4	13%	30	100%
CHIKANKATA								
Low	7	33%	1	17%	1	33%	9	30%
Medium	13	62%	5	83%	2	67%	20	67%
High	1	5%	0	0	0	0	1	3%
TOTAL	21	70%	6	20%	3	10%	30	100%

None of the UTH respondents aged 15 – 25 years had high level of knowledge. 83% of the Chikankata respondents with medium level of knowledge were aged 26 – 35 years old. UTH respondents aged 36 – 45 years had low level of knowledge.

TABLE 4: LEVEL OF KNOWLEDGE IN RELATION TO EDUCATIONAL LEVEL

(n= 60)

KNOWLEDGE	LEVEL OF EDUCATION								TOTAL	
	None		Primary		Secondary		College			
UTH										
Low	0	0	2	25%	0	0	0	0	2	7%
Medium	1	100%	6	75%	14	100%	5	71%	26	86%
High	0	0	0	0	0	0	2	29%	2	7%
TOTAL	1	3%	8	27%	14	47%	7	23%	30	100%
CHIKANKATA										
Low	2	67%	5	23%	2	40%	0	0	9	30%
Medium	1	33%	16	73%	3	60%	0	0	20	67%
High	0	0	1	4%	0	0	0	0	1	3%
TOTAL	3	10%	22	73%	5	17%	0	0	30	100%

All the UTH respondents with Secondary education had medium level of education while 67% of the Chikankata respondents with low level of knowledge had no education.

TABLE 5: LEVEL OF KNOWLEDGE IN RELATION TO PARITY

(n=60)

KNOWLEDGE	PARITY						TOTAL
	None	One	Two	Three	Four	Five and above	
UTH							
Low	2 17%	0 0	0 0	0 0	0 0	0 0	2 7%
Medium	10 83%	10 91%	3 100%	0 0	2 67%	1 100%	26 86%
High	0 0	1 9%	0 0	0 0	1 33%	0 0	2 7%
TOTAL	12 40%	3 37%	3 100%	0 0	3 10%	1 3%	30 100%
CHIKANKATA							
Low	2 20%	2 33%	2 50%	2 40%	0 0	1 20%	9 30%
Medium	7 70%	4 67%	2 50%	3 60%	0 0	4 80%	20 67%
High	1 10%	0 0	0 0	0 0	0 0	0 0	1 3%
TOTAL	10 27%	6 20%	5 17%	5 17%	0 0	5 17%	30 100%

All UTH respondents with low level of knowledge were Primigravidae, while 80% of the Chikankata respondents with medium level of knowledge were Para – 5 and above.

ATTITUDE

**TABLE 6: POSITIVE RESPONSES TO QUESTIONS ON ATTITUDE
(n=60)**

VARIABLE	UTH		CHIKANKATA	
	Frequency	R.F	Frequency	R.F
Importance of Pregnant women to know their HIV status				
YES	29	97%	24	80%
NO	1	3%	6	20%
Willingness to take an HIV test				
YES	24	80%	27	90%
NO	5	17%	2	7%
Don't Know	1	3%	1	3%
Feelings about VCT for MTCT of HIV				
Very Good	18	60%	7	24%
Good	12	40%	22	73%
Bad	0	0	1	3%
Willingness to take ARV If HIV (+)				
YES	28	93%	30	100%
NO	2	7%	0	0
Personal Reaction after Transmission of HIV to baby				
Guilty	13	43%	10	33%
Accept the results	9	30%	9	30%
Nothing	0	0	1	4%
Worried	8	27%	10	33%
Action to be taken if transmitted HIV to baby				
Buy medicines	29	97%	29	97%
Do nothing	1	3%	1	3%
Willingness to breastfeed if HIV (+)				
Wouldn't breastfeed	26	87%	11	37%
Exclusively breastfeed for 6 months then stop abruptly	3	10%	6	20%
Mixed Feed	0	0	1	3%
Exclusively breastfeed and continue breastfeeding after 6 months	1	3%	12	40%

97% of the respondent from U.T.H and 80% from Chikankata stated that it was important for pregnant women to know their HIV status. 80% from UTH were willing to take an HIV test

and 90% from Chikankata, 60% of the respondents from UTH felt that the VCT for MTCT of HIV was very good while only 24% from Chikankata felt it was very good.

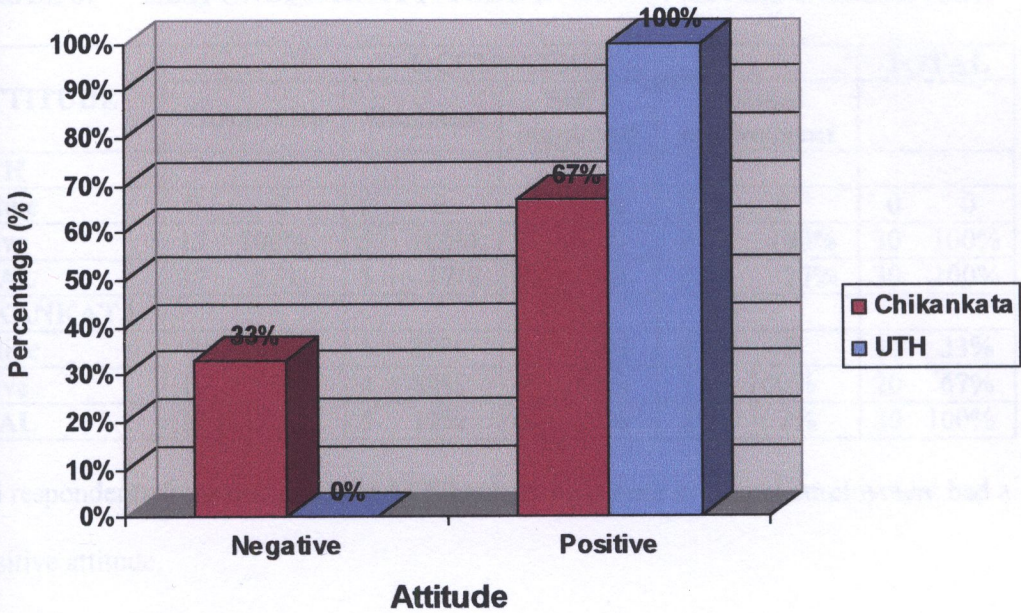
93% of the respondents from UTH were willing to take an ARV if tested HIV positive where as 7% were not willing while all respondents from Chikankata were willing to take an HIV test.

43% from UTH felt that they would be guilty if they transmitted HIV to their baby, while 30% would accept the results and 27% would be worried while 33% from Chikankata would feel guilty, 30% would accept the results and 33% would be worried.

97% of the respondents from both UTH and Chikankata would seek medical advice if they learn that their baby has acquired HIV infection.

87% of the respondents from UTH wouldn't be willing to breastfeed if HIV positive while in Chikankata only 37% of the respondents wouldn't be willing to breastfeed.

GRAPH 3: RESPONDENTS ATTITUDE



All respondents (100%) from UTH had a Positive attitude, while 33% of the Chikankata respondents had a negative attitude.

TABLE 7: RESPONDENTS ATTITUDE IN RELATION TO EDUCATIONAL LEVEL

(n= 60)

ATTITUDE	EDUCATIONAL LEVEL								TOTAL	
	None		Primary		Secondary		College			
UTH										
Negative	0	0	0	0	0	0	0	0	0	0
Positive	1	100%	8	100%	12	100%	9	100%	30	100%
TOTAL	1	3%	8	27%	12	40%	9	30%	30	100%
CHIKANKATA										
Negative	3	60%	6	30%	1	20%	0	0	10	33%
Positive	2	40%	14	70%	4	80%	0	0	20	67%
TOTAL	5	17%	20	67%	5	17%	0	0	30	100%

60% of the respondents from Chikankata with a negative attitude had no education.

**TABLE 8: RESPONDENTS ATTITUDE IN RELATION TO OCCUPATION
(n=60)**

ATTITUDE	OCCUPATION				TOTAL			
	Housewife		Business		Self - employed		Formal employment	
UTH								
Negative	0	0	0	0	0	0	0	0
Positive	17	100%	5	100%	0	0	8	100%
TOTAL	17	57%	5	17%	0	0	8	27%
CHIKANKATA								
Negative	7	41%	1	20%	2	33%	0	0
Positive	10	59%	4	80%	4	67%	2	100%
TOTAL	17	57%	5	17%	6	20%	2	7%

All respondents from both UTH and Chikankata who were in formal employment had a positive attitude.

EXPERIENCES

TABLE 9: RESPONDENTS POSITIVE RESPONSES TO QUESTIONS EXPERIENCES

(n=60)

VARIABLE	UTH		CHIKANKATA	
	Frequency	R..F	Frequency	R.F
Reception of staff towards Women seeking HIV services				
Very Good	16	53%	4	14%
Good	9	30 %	10	33%
Poor	3	10%	0	0
Not applicable	2	7%	16	53%
Maintenance of Confidentiality by Health Care Providers on HIV results				
YES	28	93%	25	83%
NO	2	7%	1	3%
Don't Know	0	0	4	14%
Maintenance of Privacy during VCT services for HIV				
YES	30	100%	23	77%
NO	0	0	2	7%
Don't know	0	0	5	16%
Communities' perception of non – breastfeeding Mother				
Is HIV(+)	19	63%	16	53%
Is bewitched	1	3%	4	14%
Doesn't care about her baby	6	20%	8	26%
Don't know	4	14%	2	7%

This table shows that 53% of the respondents from UTH stated that the reception of staff towards Women seeking HIV services was very good in comparison to only 14% from Chikankata. 93% from UTH and 83% from Chikankata stated that Confidentiality was maintained by Health Care Providers when handling HIV results.

100% of UTH respondents felt that Privacy was maintained during VCT services for HIV as compared to 77% from Chikankata.

63% of the UTH respondents felt that the Communities' perception of a woman who chooses not to breastfeed is HIV positive as compared to 53% from Chikankata. 20% from UTH felt that the woman did not care for the baby while, there were 53% respondents from Chikankata who felt the community would perceive such a person to be HIV positive.

GRAPH 4: LEVEL OF EXPERIENCE
(n=60)



Majority of the respondents (93% from U.T.H and 80% from Chikankata) had good experiences while only 7% from UTH and 20% from Chikankata had poor experiences.

TABLE 10: LEVEL OF EXPERIENCE IN RELATION TO AGE

(n=60)

EXPERIENCES	AGE						TOTAL
	15 – 25		26 – 35		36 – 45		
UTH							
Poor	0	0	2	13%	0	0	2 7%
Good	11	100%	13	87%	4	100%	28 93%
TOTAL	11	100%	15	50%	4	100%	3 100%
CHIKANKATA							
Poor	6	29%	0	0	0	0	6 20%
Good	15	71%	6	100%	3	100%	2 80%
TOTAL	21	70%	6	20%	3	10%	30 100%

All respondents from both UTH and Chikankata aged 36 – 45 years had good experiences.

All UTH respondents and 29% of the Chikankata respondents aged 15 – 25 had poor experiences.

TABLE 11: LEVEL OF EXPERIENCES IN RELATION TO OCCUPATION

(n=60)

EXPERIENCES	OCCUPATION						TOTAL	
	Housewife		Business		Self-employed			Formal employment
UTH								
Poor	0	0	1	17%	0	0	1 14%	2 7%
Good	17	100%	5	83%	0	0	6 86%	28 93%
TOTAL	17	100%	6	20%	0	0	7 23%	30 100%
CHIKANKATA								
Poor	5	29%	0	0	1	20%	0 0	6 20%
Good	12	71%	4	100%	4	80%	4 100%	24 80%
TOTAL	17	57%	4	13%	5	16%	4 13%	30 100%

Most of the UTH respondents (86%) who were formally employed had good experiences and all those formally employed from Chikankata had also good experiences.

TABLE 12: LEVEL OF KNOWLEDGE IN RELATION TO ATTITUDE
(n=60)

ATTITUDE	KNOWLEDGE						TOTAL	
	LOW		MEDIUM		HIGH			
UTH								
Negative	0	0	0	0	0	0	0	0
Positive	2	100%	26	100%	2	100%	30	100%
TOTAL	2	7%	26	86%	2	7%	30	100%
CHIKANKATA								
Negative	2	22%	8	40%	0	0	10	33%
Positive	7	78%	12	60%	1	100%	20	67%
TOTAL	9	30%	20	67%	1	3%	30	100%

All Chikankata respondents with positive attitude also had a high level of knowledge.

TABLE 13: RESPONDENTS LEVEL OF KNOWLEDGE IN RELATION TO EXPERIENCES
(n=60)

EXPERIENCES	KNOWLEDGE						TOTAL	
	LOW		MEDIUM		HIGH			
UTH								
Poor	0	0	1	4%	1	50%	2	7%
Good	2	100%	25	96%	1	50%	28	93%
TOTAL	2	7%	26	86%	2	7%	30	100%
CHIKANKATA								
Poor	4	44%	2	10%	0	0	6	20%
Good	5	56%	18	90%	1	100%	24	80%
TOTAL	9	30%	20	67%	1	3%	30	100%

Shows that all the respondents (100%) from UTH who had low level of knowledge had good experiences while all the Chikankata respondents' with high level of knowledge also had good experiences.

TABLE 14: LEVEL OF ATTITUDE IN RELATION TO EXPERIENCES**(n=60)**

EXPERIENCES	ATTITUDE				TOTAL	
	Negative		Positive			
UTH						
Poor	0	0	2	7%	2	7%
Good	0	0	28	93%	28	93%
TOTAL	0	0	30	100%	30	100%
CHIKANKATA						
Poor	2	20%	4	20%	6	20%
Good	8	80%	16	80%	24	80%
TOTAL	10	33%	20	67%	30	100%

93% of the respondents from UTH with positive attitudes had good experiences.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS AND IMPLICATION FOR THE HEALTH CARE SYSTEM

5.1 INTRODUCTION

The research study aimed at determining the knowledge, attitude and experiences of pregnant women towards Prevention of Mother to Child Transmission (PMTCT) of HIV. The study was prompted by the increase in the risk of women acquiring HIV which is then transmitted to the baby either antenatally, intranatally or postnatally.

The findings of the study are based on analysis of responses of 60 pregnant women, i.e. 30 respondents from Chikankata and 30 respondents from UTH who were randomly selected, interviewed by the use of a structured interview schedule, in the antenatal clinic sites.

This chapter discusses the findings of the study and the implications of the study to the Health Care System.

5.2 CHARACTERISTICS OF THE SAMPLE

Section A of the questionnaire consisted of questions that revealed the demographic information of the respondents. Demography "is the study of the size, territorial distribution, and composition of the population, its also concerned with the components of population change, fertility, mortality and migration and with the changing characteristics of the population". (Bright, 1988).

Chart 1 shows that all respondents were pregnant women aged between 15-45 years. In the urban area (UTH) majority of the respondents 50% were 26-35 years while from the rural area (Chikankata) 70% of the respondents were aged 15-25 years. This is in agreement with CSO (1996) report, which states that in the urban area, age specific fertility rates peak at 25-29 years while in the rural area the peak is at 20-24 years. There were no respondents in the age group of 45-49 years, this may be due to the fact that in this age group, most women have attained satisfied parity. These findings are in agreement with CSO (1996) which states that fertility rates range between 45-49 years does decline.

Table 1 illustrates other demographic variables. 90% of both UTH and Chikankata respondents were married. These findings are in contrast with ZDHS (1996) which states that six in ten Zambian women (61%) of the reproductive age are currently in a marital union. From the above findings, it is likely that not all the women were actually married. Generally, in the Zambian society it is not acceptable to be pregnant out of wedlock, it is highly stigmatised. These findings agree with the findings of Suya. (2000) in a study entitled "Factors contributing to late antenatal booking in Lusaka urban", where she states that pregnancy outside wedlock is highly stigmatised.

47% of the UTH respondents had attained secondary education, while 73% of the Chikankata respondents had attained only primary education. Low level of education maybe attributed to a number of factors, such as early marriages, which are related to certain traditions and customs such as initiation ceremony (Nkolola) in the Southern Province, where a woman after attaining puberty is expected to get married. Other factors maybe attributed to low socio-economic status of most families in the rural area, thus sending a child to school is not a priority. Also, secondary schools are fewer in the rural areas than in the urban area.

CSO (1996) states that enrolment in the female population is substantially higher in the urban than the rural area in all age groups. It also states that at the age of 16 and older women, are much less likely than men to be enrolled in school presumably due to cultural norms which encourages girls to drop out of school, to get married and start a family. 93% of the UTH and 97% of the Chikankata respondents claimed to be Christians. This may be probably explained that since Zambia is a Christian nation, many people are affiliated to Christianity. 57% from both UTH and Chikankata were housewives, this maybe attributed to the low level of education, lack of employment resulting to early marriages.

36% of the UTH and 33% of the Chikankata respondents were primigravidae. This may be due to low education level, where the only option is marriage.

5.3 KNOWLEDGE

Section B of the questionnaire (appendix) assessed the knowledge of pregnant women on PMTCT of HIV. Graph 2 shows that majority of the respondents, (86% of UTH and 67% of Chikankata) had medium level of knowledge. This may be attributed to the fact that there is a well established MTCT centre based in the Antenatal Unit at UTH. Therefore, IEC on PMTCT has been integrated in the routine antenatal services as compared to Chikankata where there is no such centre.

The study findings are in agreement with Schaffer et al (1999) in a study entitled, "*Impact of HIV on children in Bangkok, Thailand*", who states that many women who attended antenatal services were given information on PMTCT and VCT was offered. This resulted to increased knowledge in the women. Panos Institute and UNICEF (2001) conducted a pilot study in Burkina Faso (Koudougou) where there was no specific MTCT programme. This, hindered

pregnant women from making informed choices to help reduce MTCT resulting to inadequate knowledge.

Table 2 shows that all respondents from UTH and 93% from Chikankata were conversant with the mode of transmission of HIV. 73% of the Chikankata respondents knew that HIV can be transmitted through breast milk as compared to 53% from UTH which has an MTCT centre. It is likely that the UTH respondents have not fully grasped the concepts of MTCT of HIV. For Chikankata, it maybe due to the HIV awareness and prevention programme which was initiated in 1987. On the other hand, 30% of the Chikankata and 17% of the UTH respondents thought that mosquito bites can transmit HIV. These findings are in agreement with CBOH/MOH (1999) report which states that from the general population of Zambia, 30% think mosquito bites can transmit HIV. This shows that there are still some misconceptions about HIV transmission.

Majority of the respondents, 90% from UTH knew the definition of MTCT of HIV compared to only 57% from Chikankata. 53% of the UTH respondents were able to state the period of MTCT by HIV as compared to only 27% of the Chikankata respondents. The study findings are in agreement with PANOS INSTITUTE/UNICEF (2001), Pilot study done in rural Zambia, which found that in areas with well-established MTCT programmes, women were more knowledgeable about MTCT programmes.

53% of the UTH respondents knew the treatment given to HIV positive mothers in PMTCT of HIV as compared to only 20% of the Chikankata respondents. All Chikankata and 90% of the UTH respondents had no knowledge on the side effects of ARV drugs. This could be

attributed to the fact that where there are MTCT centres, health care providers do discuss the type of treatment given to HIV positive mothers but perhaps do not emphasize on the side effects of ARV drugs. Also, ARV drugs are rather a new concept in Zambia and hence many people are not yet well versed with this therapy. 63% of the UTH and only 37% of the Chikankata respondents stated that to reduce MTCT of HIV, it was important not to breast-feed. These findings are in agreement with Ndubani and Bond, (1999) who states that most women were well informed about MTCT and knew that HIV positive mothers should not breast-feed to reduce MTCT.

Table 3 shows that from UTH, none of the respondents aged 15-25 years had high level of knowledge and none of the respondents aged 36-45 years had low level of knowledge. 83% of the Chikankata respondents with medium level of knowledge were aged 26-35 years old. Perhaps, it is likely that those aged 15-25 years were primigravidae who had only one or a few antenatal visits, hence not exposed to IEC on MTCT. Those aged 36-45 years could be multigravidae and have already attended antenatal clinics and were familiar with the MTCT concept. The above findings support Nsemukila et al (1998) who states that the quality of knowledge improved with age possibly due to pregnancy experiences.

Table 4 shows that all the UTH respondents with secondary education had medium level of education, while 67% of the Chikankata respondents with low level of knowledge had no education. The study findings are similar with CSO (1996) report that states that pregnant women with no education are less likely to seek antenatal services as they usually live in rural areas where access to information and antenatal services is difficult. Also, a woman with secondary or higher education are more likely to receive antenatal care.

Table 5 shows that all UTH respondents with low level of knowledge were primigravidae, while 80% of the Chikankata respondents with medium level of knowledge were Para 5 and above. The findings in this study clearly show that the UTH respondents are more knowledgeable on MTCT, as PMTCT has been integrated in antenatal services than the Chikankata respondents who have no access to an MTCT centre.

5.4 ATTITUDE

Section C of the questionnaire (appendix 1) had questions that aided the researcher assess the pregnant women's attitude towards PMTCT of HIV.

Chart 2 shows that all UTH respondents had a positive attitude while 33% of the Chikankata respondents had a negative attitude towards PMTCT of HIV. Panos Institute/UNICEF (2001) report done in rural Zambia found that in some of the areas where there was a comprehensive MTCT programme with VCT and ARV, the uptake of the intervention by pregnant women was considered low. This was associated to the stigmatisation of clients seeking MTCT services. This implies that it is not in all MTCT centres where clients will have a positive attitude.

Table 6 shows that majority of the respondents from both UTH (80%) and Chikankata (90%) felt it was important to know their HIV status and were willing to take an HIV test. Some of the reasons cited were: it would enable the HIV positive pregnant women seek medical advice to prevent further spread of infection to the baby. Also, it will help one take precaution measures such as faithfulness to one partner and alternative feeding options. The study findings are supported by Des Fransman (1999), who states that most respondents were willing to have an HIV test, the few that refused did not want to know their HIV status.

There are other studies that do not agree with findings of this study, Rantona K (2000), states that women were generally afraid of HIV testing due to the stigma associated with those who are HIV positive.

60% of the UTH respondents felt that VCT for MTCT of HIV was very good while 73% of the Chikankata respondents felt it was good. The reasons cited were that, it enabled one make a decision concerning her life style pertaining to her HIV status. VCT also helps one become knowledgeable, hence, take precautions to prevent HIV infection. The study finding agrees with Philippe Msellati et al (1998) who states that VCT in view of reducing MTCT is well accepted by pregnant women.

Most of the UTH respondents (93%) and all Chikankata respondents were willing to take anti-retroviral drugs if HIV positive. These findings agree with Des Fransman (1999) who states that most of the women were in favour of taking anti-retroviral drugs if need arose. The respondents' willingness was based on the availability of the drug. Among the UTH respondents 43% felt they would feel guilty while 33% felt they would be worried if they transmitted HIV to their baby. The rest of the respondents stated that they would either accept the results or do nothing. From the Chikankata respondents 33% felt they would feel guilty while 33% felt they would be worried if they transmitted HIV to their baby. Majority of the UTH and Chikankata respondents stated that if they transmitted HIV to the baby, they would seek medical advice. These findings agree with Misihairabwi et al (1997) who states that mothers of children who were HIV positive expressed great and deep regret for transmitting the virus. He also states that it is up to the individual woman to make an informed choice on the method of feeding.

87% of the UTH and only 37% of the Chikankata respondents stated that if HIV positive they would not breast feed. 40% of the Chikankata respondents stated that they would exclusively breast-feed and continue breast-feeding after 6 months. The reasons for not breast-feeding cited were that, since breast-milk contains the HIV virus it would mean continuously re-infecting the baby. The other respondents who ascribed to continue breast-feeding stated that breast milk is best for the baby and besides, affordability of breast milk substitutes was prohibitive. The study findings about HIV positive mothers not breast-feeding does not agree with Ndubani and Bond, (1999) who state that even though most women when HIV positive would not want to breast-feed but due to fear of stigma, still resort to breast-feeding.

The findings from the study where HIV positive women would continue to breast-feed agrees with PANOS INSTITUTE and UNICEF (2001) pilot study report done in Burkina Faso, where HIV positive women would continue breast-feeding as access to milk substitutes are prohibitively unaffordable. Table 7 shows that 60% of the Chikankata respondents with a negative attitude had no education. It is likely that those with no education are not likely to regularly attend antenatal care where MTCT aspects are discussed. Also those with no education would have poor socio-economic status hence lack accessibility to media.

Table 8 shows that all respondents from both UTH and Chikankata who were in formal employment are likely to be skilled or professional, hence have attained exposure through school and media about PMTCT resulting to having a positive attitude. ZDHS (1996) agrees with the study findings which states that those in formal employment have attained post secondary education and have access to media.

5.5 EXPERIENCES

Section D of the questionnaire (appendix 1) assessed the experiences of pregnant women towards PMTCT of HIV. Chart 4 shows that majority of the respondents from both UTH (93%) and Chikankata (80%) had good experiences.

The study findings does not fully agree with the PANOS INSTITUTE/UNICEF (2001) pilot study conducted in rural Zambia where in areas where there were MTCT programmes, women felt they were well treated compared to areas where there were none. The women in Chikankata still had good experiences despite not having an MTCT centre.

Table 9 shows that majority of the UTH (93%) and Chikankata (83%) respondents stated that confidentiality was maintained by Health Care Providers when handling HIV results. Some of the reasons given were to protect the clients' integrity and credibility. Also it was unethical for Health Care Providers to disclose HIV results, as these were confidential. These study findings do agree with Cartoux. et al (1998) where the overall acceptability of voluntary HIV counselling and testing, was found to be high. Basically due to the trust of the pregnant women in the Health Care Providers.

Another study conducted by PANOS INSTITUTE/UNICE (2001) done in Ukraine does not agree with the researchers' findings. It states that the Health Workers failed to maintain confidentiality and disclosed the HIV status to the community without the consent of the infected person.

All the respondents from UTH and 77% Chikankata respondents felt that privacy was maintained during VCT services for HIV. The rationale given was it helped avoid stigmatisation of the client and allowed the client freely express herself. These findings do agree with Des Fransman (1999) where respondents that received individual pre-test

counselling did not feel coerced by clinic staff but were obliged to the test by their own free will. This probably explains why women are willing to go for VCT of HIV.

Concerning the community's perception of women who choose not to breast-feed, 63% of the UTH respondents and 53% of the Chikankata respondents perceived her to be HIV positive. These findings agree with the 13th International AIDS Conference 2000 from Botswana: which states that men expressed negative attitudes towards women who did not breast-feed assuming it would indicate that she is HIV positive.

Table 10 shows that all respondents from both UTH and Chikankata aged 36-45 years old had good experiences. It would probably mean that at such an age group the respondents would have probably been exposed to issues pertaining to MTCT and VCT. This resulted to them being inclined to having good experiences. Table 11 shows that most of the UTH respondents (86%) and all Chikankata respondents who were formally employed had good experiences. This may be attributed to the fact that those in formal employment had a higher level of education and were able to articulate issues regarding MTCT and VCT. The study findings are in agreement with CSO(1996) where a woman with secondary education or higher education is likely to be in formal employment also receive antenatal care services and have more access to information.

5.6 KNOWLEDGE, ATTITUDE AND EXPERIENCES

The study findings show that all Chikankata respondents with positive attitude had a high level of knowledge. An individual who is knowledgeable is inclined to have a positive attitude. These findings support Shaffer et al (1999) which states that due to information on PMTCT and VCT, many women had increased knowledge and responded to VCT, hence respond to measure to reduce MTCT of HIV infection. The study findings do support the

first (1st) hypothesis which states that, “The higher the knowledge pregnant women have on PMTCT of HIV, the more positive their attitude”.

Table 16 shows that all respondents from UTH who had a low level of knowledge had good experiences while all Chikankata respondents with high level of knowledge had good experiences. From these findings it can be deduced that the level of knowledge does not necessarily determine good experience. Therefore, there is no relationship between knowledge and good experiences. Study findings also shows that majority of the UTH respondents (93%) with positive attitudes had good experiences. This is in agreement with Msellati et al (1998) where VCT in view of reducing MTCT was well accepted by pregnant women. Those who were HIV positive, alternative feeding options were proposed to them as well as active follow up of children together with social and nutrition support.

There is a relationship between positive attitude and good experiences. According to ZDHS (1996) beliefs, feeling (attitudes) perceptions have an effect on experiences. Therefore, the study findings do support the second (2nd) hypothesis which states that, positive attitude in pregnant women towards PMTCT of HIV leads to good experiences.

5.7 IMPLICATIONS TO THE HEALTH CARE SYSTEM

The health sector has an integral role to contribute to the prevention and reduction of MTCT of HIV. MTCT has become a critical child health problem contributing to severe morbidity and mortality, undermining the impact of programs that have significantly reduced child mortality in previous decades.

Therefore, it requires the concerted efforts of all health workers to curb this planetary tragedy. Initially, all health workers, particularly those dealing with maternal child health care should be trained on the concepts of MTCT, current intervention and VCT. There is need to

integrate and place an emphasis of the concepts of MTCT in the school health programme as well.

There is need to re-evaluate the Information, Education and Communication on MTCT being given to pregnant women. This will help the clients make informed choices on aspects of feeding practices and safer sex.

The nurses should ensure that they create a client-friendly environment, in which MTCT and VCT programmes are integrated in the routine antenatal care services. This will reduce the stigmatisation and discrimination placed on HIV positive mothers.

There is need for the Health Care Providers to seek avenues through Neighbourhood Health Committee to disseminate and sensitise the community on aspects of MTCT. This will help reduce discrimination of women.

The Voluntary Counselling and Testing Services should provide opportunities to counsel men who are the decision-makers and influence what the women will do after counselling.

Nurses as the major care givers need to be well vested with knowledge on MTCT. This will help them give optimal care to HIV positive pregnant women.

To scale out MTCT centers to other health institutions so that all pregnant women can benefit.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The severity of the MTCT problem in Sub – Saharan Africa is due to high rates of HIV infection in Women of reproductive age, high birth rates and lack of effective interventions and strategies. AIDS has reversed years of steady progress in Child survival and doubled Infant mortality rates in the worst affected countries.

The study was conducted in an urban area with MTCT center (UTH) and in the rural area without an MTCT center (Chikankata) among Pregnant Women. It revealed that most of the respondents with a Positive attitude had a high level of Knowledge.

The study shows that the respondents with low level of Knowledge (30%) were from Chikankata and only (7%) were from UTH. It was also evident that those respondents who had a positive attitude, valued knowing their HIV status, were willing to take an HIV test and would take appropriate measures for alternative feeding options if HIV positive.

The study further revealed that those respondents who had good experiences also had a positive attitude. It also illustrated that the perception of the community has a great influence on the Womens' response towards Voluntary Counseling and Testing services as well as feeding options. A woman who does not breastfeed is immediately labeled as HIV positive. Therefore, it is necessary to pursue further research on MTCT prevention and intervention measures to curb this scourge, which has been identified as a planetary emergency.

6.2 RECOMMENDATIONS

- 6.2.1 The Government through the Ministry of Health/ Central Board of Health with Co-operating partners should establish MTCT centers in the rural areas for example Chikankata.
- 6.2.2 There is need to train Staff on Infant feeding options for HIV positive Women and Counseling techniques.
- 6.2.3 Health Care Providers need to re-evaluate the Information, Education and Communication (IEC) strategies on MTCT. IEC should also be intensified and integrated in the Antenatal Care services provided.
- 6.2.4 Through the Neighbourhood Health Committee, it is important to sensitize the communities on aspects of MTCT to reduce stigma and discrimination.
- 6.2.5 Health Care Providers need to create a client – friendly environment in which MTCT and VCT programmes are integrated in the routine Antenatal services. The VCT services should also provide opportunities to counsel couples within the vicinity of ANC services.
- 6.2.6 Nursing training curriculum should also inco-operate the new concepts of MTCT at all levels of training.
- 6.2.7 Research on a wider scale needs to be carried out to enable generalization of findings.
- 6.2.8 Further research on how to make breastfeeding safe to reduce MTCT should be conducted.

6.3 DISSEMINATION OF FINDINGS

The presentation of the findings will be initially be presented to the Faculty of Post Basic Nursing Department. Then copies of the research report will be given to the Post Basic Nursing Department, Medical Library, Ministry of Health and the researcher will also remain with one.

Executive summaries will be sent to the Research Sites University Teaching Hospital (UTH) and Chikankata Mission Hospital. Also presentations at workshops and seminars will be done. It is hoped that recommendations would be taken into consideration and passionately implemented when resources are available.

6.4 LIMITATIONS OF THE STUDY

The study had a total of 60 pregnant women, 30 from an Urban and 30 from a rural site. The researcher felt a larger sample would have been more representative and led to generalization of the findings but this was not possible due to limited time and funding. The researcher was unable to interview only those who attended the MTCT center in U.T.H, therefore it was difficult to make comparisons.

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APPENDIX 1

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

STRUCTURED INTERVIEW SCHEDULE

TOPIC: A STUDY TO DETERMINE THE KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN TOWARDS PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV

DATE OF INTERVIEW:

PLACE OF INTERVIEW:

NAME OF INTERVIEWER:

SERIAL NUMBER:

INSTRUCTIONS TO THE INTERVIEWER

1. Introduce yourself to the respondent.
2. Explain the purpose of the interview.
3. Assure respondent of confidentiality and anonymity.
4. Get verbal consent from the respondent before the interview.
5. Tick (✓) in the box corresponding to the correct answer or state response(s) in the space provided.
6. Do not write the name of the respondent.

SECTION A: DEMOGRAPHIC DATA

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1. What was your age on your last birthday?

2. What is your marital status?

- (a) Single
- (b) Married
- (c) Divorced
- (d) Separated
- (e) Widowed

3. What is your religion?

- (a) Christian
- (b) Moslem
- (c) Hindu
- (d) Buddhist
- (e) Others, (specify)

4. What is your highest level of education?

- (a) None
- (b) Primary
- (c) Secondary
- (d) College
- (e) University

5. What do you do for a living?

- (a) Housewife
- (b) Business
- (c) Self employed
- (d) Formal employed
- (e) Unemployed

6. How many children do you have?

- (a) None
- (b) One
- (c) Two
- (d) Three
- (e) Four
- (f) Other, (specify)

SECTION B: KNOWLEDGE

7. Have you heard of HIV/AIDS?

- (a) Yes
- (b) No

8. If yes, to No. 7 where did you hear it from?

- (a) Media
- (b) Health personnel
- (c) Relatives
- (d) Friends
- (e) Church
- (f) Other (specify)

9. How is HIV/AIDS transmitted? (Tick correct answer).

- (a) Sexual intercourse
- (b) Infected blood products
- (c) Mosquito bites
- (d) Breast milk to babies
- (e) Contaminated razor, blades and needles
- (f) Sharing bathrooms and toilets
- (g) Don't know
- (h) Others (specify)

10. What is Mother to Child Transmission of HIV?

- (a) Transmitting of the virus from the mother to the child.
- (b) Giving herbal medicine to the baby.
- (c) Mother touching and cuddling the baby.
- (d) Don't know.

11. Can HIV/AIDS infection be transmitted from Mother to Child?

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

12. If yes to No. 11, how can HIV be transmitted from the mother to the child? (Tick all correct answers).

- (a) During pregnancy
- (b) During labour and delivery
- (c) During breast feeding
- (d) All the above
- (e) Non or the above
- (f) Don't know
- (g) Other (specify)

13. What treatment is given to HIV positive mothers to Prevent MTCT of HIV?

- (a) Antibiotics
- (b) Anti-retroviral drugs
- (c) Nothing
- (d) Don't know
- (e) Other (specify)

14. What are the complications of treatment given to HIV Mothers? (Tick all correct answers).

- (a) Anaemia
- (b) G.I.T upset
- (c) Dizziness
- (d) Headache
- (e) All above
- (f) Don't know

15. How can Mother to Child Transmission of HIV be Reduced? (Tick all correct answers).

- (a) Exclusively breast-feed for 4-6 months and Abruptly stop.
- (b) Not to breast-feed at all.
- (c) Mixed feeding
- (d) Prevent breast problems i.e. mastitis, Cracked and bleeding nipples, breast abscess.
- (e) All above
- (f) Don't know
- (g) Other, (specify)

--

16. Where did you hear about Mother to Child Transmission of HIV?

- (a) Media
- (b) Health personnel
- (c) Relatives
- (d) Friends
- (e) Church
- (f) Other (specify)

--

SECTION C: ATTITUDE

17. Is it important for a pregnant woman to know her HIV status?

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

--

18. Give reason(s) for your answer.

.....

.....

19. Would you take an HIV test?

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

--

20. Give reason(s) for your answer.

.....
.....

21. If your HIV test results were positive, with whom would you be willing to share the results?

- (a) Spouse/partner
- (b) Family
- (c) Friend
- (d) Church leader
- (e) No one
- (f) Other (specify)

22. What do you feel about MTCT of HIV?

.....
.....

23. What do you feel about voluntary counseling and Testing for MTCT for HIV?

- (a) Very good
- (b) Good
- (c) Bad
- (d) Very bad

24. Give reasons for your answer.

.....
.....

25. What would you do if you transmitted HIV to your baby?

.....
.....

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26. Would you breast-feed your baby if you were HIV positive?

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

27. Give reasons for your answer.

.....

.....

SECTION D: EXPERIENCES OF PREGNANT WOMEN

28. How is the reception of the staff towards the women seeking MTCT of HIV services?

- (a) Very good
- (b) Good
- (c) Poor
- (d) Very poor

29. Do health care providers maintain confidentiality when attending to HIV test results?

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

30. Give reasons for your answer.

.....

.....

31. Do you think privacy is maintained during VCT services for HIV?

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

32. Give reasons for your answer.

.....
.....

33. How do you think the community perceive a woman who chooses not to breast-feed?

- (a) She is HIV positive
- (b) She is a prostitute
- (c) She is pregnant
- (d) Others, specify

--

34. How are you preventing MTCT of HIV?

.....
.....

35. What measures do you think should be taken to reduce MTCT of HIV?

.....
.....
.....

THANK YOU VERY MUCH FOR YOUR CO-OPERATION

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE**

DEPARTMENT OF POST BASIC NURSING

**LWIIYO LWA KU ZULA LUZYIBO A MICITO YA
BASIMADA MU KUKWABILILA KUYAMBULA
KAZUNDA KA HIV/AIDS KUZWA KULI BANYINA KUYA
KU MWANA ULI MWIDA.**

BUZUBA

BUSENA

ZYINA LYA UBUZYA

MWEELWE

MALAILILE A MUNTU UBUZYA

1. Kolipandulula ku muntu ngobuzya
2. Kopandulula muzeezo wamibuzyo
3. Kosyomezya maseseke akutazyi bwa muntu ubuzyigwa.
4. Lindila kuvwiilwa kotana talika kubuzya kutegwa uzyibe naa muntu ooyu ulizumide kubuzyigwa mibuzyo.
5. Kokwenyuna () mukabbokesi kali muni abwiinguzi bwapegwa. Naa kolemba bwiinguzi bwapegwa mutuzyila tupedwe.
6. Utalembi zina lya uvwila.

MAKANI AJATIKIZYA MUNTU

IBEEELA A

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1. Ulaa myaka yongaye yakuzyalwa?
2. Uli kkwetwe sena?

- (a). Taaku pe
(b). Ndili kkwetwe
(c). Twaalekana
(d). Tulaandeene kukkala
(e). Ndili nabutema

--

3. Upaila kuli?

- (a). Kubana kristu
(b). Kubana Moslem
(c). Kubu Hindu
(d). Kubu Buddhist
(e). Izimwi (mbuli)

--

4. Makani alwiiyo lwako?

- (a). Nseyiide
(b). Asyoonto
(c). Kusekondali
(d). Ku college
(e). University

--

5. Utyani kutegwa kopona kabotu?

- (a). Ndili kwetwe
(b). Ndilasambala
(c). Ndila pinduka ndilikke (Kupanga pindu)
(d). Ndilabeleka
(e). Nsebeleki

--

6. Ulaa bana bongaye?

- (a). Taku
(b). Omwe
(c). Bobile
(d). Botatwe
(e). Bone
(f). Bali

--

CIBEELA B

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7. Wakamvwa kale makani a (HIV/AIDS) Sikalileke

- (a). Taaku
- (b). Inzya

--

8. Kuti naa wakamvwa kale, wakamvwida kuli?

- (a). Mubbuku, a radio, TV
- (b). Babelesi banseba zyabantu
- (c). Ba mukowa
- (d). Balongwe
- (e). Kucikombelo
- (f). Ku cikolo
- (g). Kuzwa ku

--

9. Bulwazi kwasikalileke buyambukila buti?

- (a). Koonana musimbi a musankwa
- (b). Zintu zibijide bulowa
- (c). Masenya
- (d). Mukupa waku nkolo kubana
- (e). Mbeli anyeleti ziyambukidwe (zibijide malowa alaa bulwazi).
- (f). Kubelesya cimbuzi comwee a cisambilo
- (g). Nsezyi
- (h). Mbuli

--

10. Ncinzi ncomvwa kuti "Banyina kumwana"
Kuyambukizya?

- (a). Kuyambukizya mwana kuzwa kuli banyina
- (b). Kupa miyanda-yanda yamisamu kumwana
- (c). Banyina kuvwavwanga mwana muvwanda
- (d). Nsezyi

--

11. Sena mwana inga wabujana bulwazi kuzwa kuli
banyina

- (a). Inzya
- (b). Taaku
- (c). Nsezyi

--

12. Mwana inga wabujana buti bulwazi kuzwa kuli banyina

- (a). Naamitwa
- (b). akuzyalwa
- (c). akunyonka
- (d). Zyoonse eezi zyotatwe
- (e). Taaku zyoonse zyaambwa kale pe
- (f). Nsezyi
- (g). Mbuli

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13. Banyina inga bapegwa musamu nzi kutegwa batayambikizyi mwana bulwazi kwasikalileke

- (a). Kujaya tuzunda twamumubili
- (b). Kuponya banyina kuti kabaciliko kwamazuba (Anti-retroviral drugs)
- (c). Taaku
- (d). Nsezyi
- (e). Mbuli

14. Mpaali alibuyumuyumu bwa "anti-retroviral drugs"

- (a). Kubula bulowa
- (b). G.I.T upset
- (c). Cizingulumpela
- (d). Mutwe kucisa
- (e). Zyoonse zyaambwa kale atala
- (f). Nsezyi pe

15. Ina bamanyina inga twabayozya-yozya buti kuti kuyambukizya bana bavwanda kuceyeceye?

- (a). Kunyonsya bana mukupa wa muzigabba (Lactogen)
- (b). Kutasolela limwi kubalabizya nkolo
- (c). Kuvwelenganya mukupa wankolo awa muzigabba
- (d). Kusilika tulonda-londa twakunkolo zya banyina
- (e). Zyoonse zyambwa atala.
- (f). Nsezyi
- (g). Mbuli

16. Nkuli nkomwamvvida kuti mwana inga wajana bulwazi oobu kwiinda kunyonka kulibanyina baciswa?

- (a). Mubbuku, radio, TV etc
- (b). Babelesi banseba zya bantu
- (c). Mikowa yangu

- (d). Balongwe
- (e). Kucikombelo
- (f). Mbuli

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CIBEELA C
KULANGANYA BULWAZI OOBU

17. Sena mukaintu umitide uleelede kuti kazyi naa ula bulwazi oobu naa pe?

- (a). Inzya
- (b). Taaku
- (c). Nsezyi

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18. Kopa twaambo kubwiinguzi bwako bwa mubuzyo wa No. 17

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19. Sena inga wapimwa bulwazi oobu?

- (a). Inzya
- (b). Taaku
- (c). Nsezyi

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20. Kopa twaambo kubwiinguzi bwaku kumubuzyo wa no. 19.

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21. Kuti naa wamana kupimwa, twaambe kwajanika ulaa sikalileke, inga waambila ni?

- (a). Mwaalumi
- (b). Bamukwasyi
- (c). Balongwe
- (d). Beendelezyi bacikombelo cangu
- (e). Taaku
- (f). Inga

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22. Ulimvwa buti amakani akupimwa akubuzya bulwazi kwasikalileke.

- (a). Kabotu kapati
- (b). Kabotu
- (c). Ndila bijilwa
- (d). Ndila bijilwa kapati

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23. Kopa twaambo kubwiinguzi bwako kumubuzyo wa no 22.

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24. Sena inga wanywa musamu wakuli kwabilila kuti bulwazi kabuciumwine mumubili kwaciindi twaambe bwajanika mulinduwe?

- (a). Inzya
- (b). Taaku

25. Inga walimvwa buti kuti wamutambukizya mwana ulimwida bulwazi kwasikalileke?

- (a). Inga nsekazyi inga ndazumina buyo kuti ndalubizya
- (b). Taaku mbwenga ndacita
- (c). Inga ndatyopwa kapati
- (d). Taaku

26. Inga watyani kuti mwana wamuyambukizya bulwazi mwana muvwanda?

- (a). Kkuya kung'anga
- (b). Kkuya kucibbadela
- (c). Kuula musamu kuzintoolo
- (d). Taaku ncenga ndacita

27. Sena inga wamunyonsya mwana kuti kozyi kuti ula bulwazi kwasikalileke?

- (a). Sena inga tomunyonsyi
- (b). Kumupa mukupa wamuzigabba kwa myezi 6
- (c). Kuvwelenganya mukupa wamucigabba ankolo.
- (d). Kunyonsya mukupa wankolo kwa myezi yiinda ku cisambomwe (6)

28. Kopa twaambo kubwiinguzi bwa no. 27

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CIBEELA D
MUKAMBONI BWA BAMAKAINTU BAMITIDE

29. Mubelesi utambulwa buti kumukaintu uyanda malailile kumakani a sikalileke

- (a). Ulitambudwe kapati
- (b). Uli tambudwe kabotu
- (c). Ta tambudwe pe
- (d). Ta bamuyandi pe
- (e). Tacilanganyizigwi pe

30. Sena babelesi ba nseba balayumya-yumya bantu bamana kuba pima bulwazi kwasikalileke.

- (a). Taaku
- (b). Inzya

31. Kopa twaambo kubwiinguzi bwa no. 30

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32. Sena mulasisikizya ciindi nemubandika makani a bulwazi bwa sikalileke abantu?

- (a). Inzya
- (b). Taaku

33. Kopa twaambo kukuvwiila kwa no.32

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34. Buleya inga bwamulanganya buti mukaintu uzimanana kutanyonsya?

- (a). Inga bati ulaa bulwazi
- (b). Inga bati wakaloogwa
- (c). Inga bati talanganyi mwana wakwe.

35. Inga twatyani kutegwa bamakaintu baleke
kuyambukizya bana balimwida abavwanda kubulwazi
bwa sikalileke.

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APPENDIX 2
WORK SCHEDULE

NO.	TASKS TO BE PERFORMED	DATES	PERSONNEL ASSIGNED TO THOSE TASKS	PERSON DAYS REQUIRED
1.	Literature review	Continuous	Researcher	-
2.	Finalize Research Proposal	Week 2 – 7 June 11 – August 1 st	Researcher	1 x 49 days = 49 days
3.	Data Collection Tool	Week 7 – 8 July 29 th – August 9 th	Researcher	1 x 14 days = 14 days
4.	Clearance from National and Funding Authority	Week 10 – 15 August 12 th – Sept 20 th	PBN Supervisor, Ethical Committee Study setting	1 x 42 days = 42 days
5.	Conducting Pilot Study	Week 13 Sept 2 nd – 8 th Sept	Researcher	1 x 7 days = 7 days
6.	Data Collection	Week 14 – 17 Sept 9 th – 4 th Oct	Researcher Research Assistant (2)	1 x 28 days = 28 days
7.	Data Analysis	Week 18 – 24 Oct 7 th – Nov 22 nd	Researcher	1 x 49 days = 49 days
8.	Report Writing	Week 25 – 27 Nov 25 th – Dec 13 th	Researcher	1 x 21 days = 21 days
9.	Draft Report to PBN	Week 28 – 29 16 th Dec – 27 th Dec	Researcher	1 x 14 days = 14 days
10.	Finalization of Report	Week 30 – 32 30 th Dec – 17 th Jan	Researcher	1 x 21 days = 21 days
11.	Monitoring and Evaluation	Continuous	Researcher	-

APPENDIX -3

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

20TH August 2002

The Executive Director
Chikankata Health Services
P/Bag S-2
MAZABUKA

u.f.s. Head of Department
Post Basic Nursing
LUSAKA



Dear Sir/Madam,

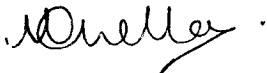
RE: PERMISSION TO CONDUCT A RESEARCH

As part of the fulfilment for a Degree Programme, I am required to carry out a Research Study. The topic of my study is "*To Determine Knowledge and attitudes of pregnant women towards Prevention of MTCT of HIV.*"

I would like therefore, to ask for permission to conduct a research study in your district. Collection of Data will be done during the month of September, 2002.

I will be very grateful if my request has been considered.

Yours faithfully.



Mulenga Chella
IV YEAR STUDENT



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

Telephone: 252453
Telegrams: UNZA. LUSAKA
Telex: UNZALUZA 44370
Fax: +260-1-250753

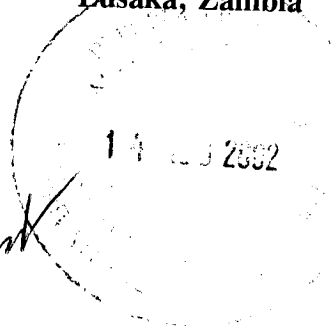
P.O. Box 50110
Lusaka, Zambia

THE EXECUTIVE DIRECTOR

U.T.H

LUSAKA

*Approved
Humbert*



Dear Sir/Madam,

Re: PERMISSION TO COLLECT RESEARCH DATA

The bearer MULENGA CHELLA is a forth year student at the Department of Post Basic Nursing, School of Medicine, University of Zambia. She/he is pursuing a Bachelor of Science in Nursing Degree. She/he is expected to carry out a research study in partial fulfilment of the requirements of the programme. Her/his research topic is "to determine Knowledge and Attitudes of Pregnant Women Towards prevention of MTCT of HIV"

I am requesting your good office to avail her with the information she needs for her/his project. For any further clarifications you could contact the undersigned. Your continued support is highly appreciated.

Thank you,

Mweemba

Mweemba Prudencia (Ms).

COURSE CO-ORDINATOR.

APPENDIX 4

BUDGET

BUDGET CATEGORY	UNIT COST IN KWACHA	QUANTITY	TOTAL
1. STATIONERY			
◆ Bond Paper	25,000	X 2 Reams	50,000.00
◆ Pens	500	X 6	3,000.00
◆ Pencils	200	X 6	
◆ Rubber	1,500	3 Pieces	4,500.00
◆ Note books	5,000	3	15,000.00
◆ Tippex	7,500	1	7,500.00
◆ Scientific calculator	30,000	1	30,000.00
◆ Research bags	35,000	3	105,000.00
◆ Stapler	20,000	1	20,000.00
◆ Staples	5,000	1 Box	5,000.00
◆ perforator	15,000	1	15,000.00
SUB TOTAL			256,200.00
2. PERSONNEL			
◆ Lunch Allowance			
- Research Assistant	35,000.00	X 2 x 5 days	350,000.00
- Researcher	35,000.00	X 1 x 10 days	350,000.00
◆ Transport			
- Research Assistant	20,000.00	X 2 x 5 days	200,000.00
- Researcher	20,000.00	X 1 x 10 days	200,000.00
SUB TOTAL			1,100,000.00
3. TYPING SERVICES			
◆ Typing and printing interview schedule.	2,000.00	X 5 pages	10,000.00
◆ Research Proposal typing.	2,000.00	X 50 pages	100,000.00
◆ Research Proposal	200.00	X 50 pages	10,000.00

photocopying.			
◆ Photocopying Interview Schedule.	200.00	X 60 copies x 5 pgs	60,000.00
◆ Research Report Typing.	2,000.00	X 100 pages	200,000.00
◆ Research Report photocopying.	200.00	X 100 pages x 4 cps	80,000.00
◆ Binding Proposal.	10,000.00	X 1 copy	10,000.00
◆ Binding Report.	40,000.00	X 4 copies	160,000.00
◆ Diskette	5,000.00	X 4	20,000.00
SUB TOTAL			650,000.00
CONTINGENCY (10% OF TOTAL BUDGET)			10/100 X K2,006,200.00 K200,620.00
GRAND TOTAL			K2,006,200.00

JUSTIFICATION FOR THE BUDGET

STATIONERY

The two (2) reams of bond paper were used for the Research proposal and the final Research report as well as extra copies of the report. In addition to this, the Questionnaire, which consists of eight (8) pages, was photocopied to make 60 copies for respondents. The research bags were needed to ensure that the research questionnaires are kept under lock and confidentiality is maintained between the respondent and the Investigator. The scientific calculator was required for Data analysis.

Other accessories needed for the routine collection of data e.g. pens, notebooks, staplers, staples, perforator etc.

PERSONNEL

Data collection was conducted throughout the day and due to limited time allocated, the Investigator hire and trained two (2) Research Assistants. The Investigator and her Research Assistants needed lunch as well as remuneration, hence its allocation in the budget.

TYPING SERVICES

The Investigator also had the Questionnaire, Research Proposal and Research Report typed, printed and photocopied, hence the figure estimated in the budget. In addition to this she had to buy a diskette to copy all the data for safety of the research document. Finally the contingency which is 10% of the total budget was needed for any eventualities, extra cost or inflation of prices.

APPENDIX 5

GANTT CHART

2000 – 2003

NO.	TASKS TO BE PERFORMED	RESPONSIBLE PERSON	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR
1.	Literature Review	Researcher	←								→	
2.	Finalize Research Proposal	Researcher	←	↔	→							
3.	Data Collection Tool	Researcher		←	↔							
4.	Clearance	Facilitator			←	↔						
5.	Pilot Study	Researcher			↔							
6.	Data Collection	Research Team				↔	→					
7.	Data Analysis	Researcher					↔	→				
8.	Report Writing	Researcher						↔	→			
9.	Draft Report to PBN	Facilitator							↔	→		
10.	Finalization of Report	Researcher								→		
11.	Monitoring and Evaluation	Researcher	←								→	