

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



**A STUDY TO DETERMINE FACTORS CONTRIBUTING TO LOW UTILIZATION  
OF VOLUNTARY HIV COUNSELING AND TESTING AT CHILONGA HOSPITAL**

**- MPIKA**

**BY**

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## **LIST OF ABBREVIATIONS**

<b>AIDS</b>	-	<b>Acquired Immune Deficiency Syndrome</b>
<b>ART</b>	-	<b>Anti-Retroviral Therapy</b>
<b>CBoH</b>	-	<b>Central Board of Health</b>
<b>CSO</b>	-	<b>Central Statistical Office</b>
<b>CTC</b>	-	<b>Counseling Testing and Care</b>
<b>DHM</b>	-	<b>District Health Management Team</b>
<b>DHS</b>	-	<b>Demographic Health Survey</b>
<b>FGD</b>	-	<b>Focus Group Discussion</b>
<b>HIV</b>	-	<b>Human Immuno Deficiency Virus</b>
<b>IEC</b>	-	<b>Information, Education and Communication</b>
<b>MoH</b>	-	<b>Ministry of Health</b>
<b>NAC</b>	-	<b>National AIDS Council</b>
<b>NGO</b>	-	<b>Non-Governmental Organization</b>
<b>OPD</b>	-	<b>Out Patient Department</b>
<b>PLWHA</b>	-	<b>Positive Living with HIV/AIDS</b>
<b>PMTCT</b>	-	<b>Prevention of Mother to Child Transmission</b>
<b>STI</b>	-	<b>Sexually Transmitted Infections</b>
<b>TB</b>	-	<b>Tuberculosis</b>
<b>UNAIDS</b>	-	<b>Joint United Nations Programme on HIV/AIDS</b>
<b>UNICEF</b>	-	<b>United Nations Children Fund</b>
<b>UNZA</b>	-	<b>University of Zambia</b>
<b>VCT</b>	-	<b>Voluntary Counseling and Testing</b>
<b>WHO</b>	-	<b>World Health Organization</b>
<b>ZCC</b>	-	<b>Zambia Counseling Council</b>
<b>ZVCTS</b>	-	<b>Zambia Voluntary Counseling and Testing Services</b>



## DECLARATION

I, Sr. Rosemary Mwaba Kabonga, hereby declare that the work presented in this study, for the Degree of Bachelor of Science in Nursing has not been presented wholly or in part for any other Degree and is not being currently submitted for any other Degree.

Signature:.....*Sr. R. Kabonga*.....  
Candidate

Approved:.....*FM Adele*.....

*28<sup>th</sup> March 06*



## STATEMENT

I certify that this study is entirely the outcome of my own independent investigations. I have clearly indicated the sources to which I am indebted through out the text and in the references.

Signed:.....Sr. R. Kabonga.....

Name:.....Sr. Rosemary Kabonga.....

Date:.....28/03/06.....

## **DEDICATION**

I dedicate this study to my late father Edward Mwansa Kabonga for he taught me to be truthful and faithful.

## **ABSTRACT**

Voluntary HIV counseling and testing is a key strategy in combating HIV/AIDS pandemic. The international efforts to prevent and control HIV/AIDS have called upon the different health and social strategies to combat the epidemic. In Zambia many strategies have been implemented which include VCT Chilonga Hospital has been offering counseling services for almost 15 years but VCT services is in its infancy stage. The purpose of this study was to determine factors that influence the low utilisation of VCT services at Chilonga Hospital in Mpika.

The Literature reviewed on VCT demonstrated that VCT services are generally under utilized but no study has been done where to find out the contributing factors to low utilization.

A cross sectional descriptive study using interview schedule and Focus Group Discussions were used to collect data. The study was conducted at Chilonga Hospital. Stratified random sampling was done to select the sample size of fifty (50) respondents and twenty (20) for Focus Group Discussion. The data collected was analyzed manually using a data master sheet and a calculator. The findings were presented in frequency tables, figures, and graphs as well as cross tabulations.

The study revealed that all the respondents (100%) had heard about HIV/AIDS and VCT. The majority of the respondents (92%) had adequate knowledge about HIV/AIDS. It was also revealed that majority of the respondents (80%) were willing to have an HIV test for the reason of knowing their health status while (20%) were not willing.

The adequate knowledge on HIV/AIDS by majority of the respondents could be attributed to the health education put in place by the Ministry of Health and various sectors to combat the infection. The unwillingness to be tested for HIV could be attributed to the fact that there is still stigma attached to the disease as well as fear.

Major recommendations are that health education on benefits of VCT should be intensified and that the community or people should be encouraged to talk openly about HIV/AIDS so that the stigma attached to the disease can disappear and more people may be willing to be tested for HIV.

## CHAPTER 1

### 1.0 INTRODUCTION

Voluntary HIV Counseling and Testing (VCT) is a key strategy in combating the Acquired Immune Deficiency Syndrome (AIDS) epidemic. It begins with self-awareness. This implies that each individual knows his/her HIV status. The international efforts to prevent and control HIV/AIDS have called upon the different health and social strategies to combat the epidemic. In Zambia many strategies have been implemented among which VCT has been promoted as an intervention for prevention of HIV transmission and as a behaviour change strategy. The emphasis of the VCT strategy has been placed on the "Voluntary" factor, suggesting that people choose to come for counseling and testing for HIV infection on their own volition. The word "voluntary" is implied to mean, in this context, ability to act of one's own free will. VCT and related services can be requested and initiated from any point in the community. The community is to be looked at in a broader perspective that is, the individual, family, Neighbourhood, church, Community Based Organizations, Non-Governmental Institutions and Departments.

VCT is based on the individual and the service provider's desire to help the client make an informed choice and be better equipped to make a decision to pursue options such as; pre-HIV- test counseling, HIV testing, post- HIV -test counseling and, involvement in prevention and care activities.

VCT improves health since positive clients are advised on healthy and positive lifestyles. The World Health Organization (WHO) report of 2001 showed that a total of 40 million people around the world were living with HIV/AIDS. 37.1 million were adults, 18.5 million women and 3 million children below 15 years of age. Sub-Sahara Africa contributed 28.5 of the 40 million. The biggest tragedy is

the growing number of orphans estimated at 14 million Worldwide of which 11 million are in Africa.

The population of Zambia stands at 10.3 million people (census, 2000). 16% of adult population aged 15-49 years is living with the Human Immuno-Deficiency Virus (HIV), (NAC report 2002). The magnitude of HIV pandemic in Zambia has called for multi-sectoral response to the problem. The Ministry of Health (MoH)/Central Board of Health (CBoH) and other stakeholders are concerned with the prevailing HIV/AIDS situation. Main areas of concern are; scaling up and accessing of interventions such as Anti Retro Viral Therapy (ART) and VCT, and Prevention of Mother to Child Transmission (PMTCT).

VCT is the cornerstone to early access to prevention as well as to care and support services, awareness to HIV and knowledge of personal risk behaviours resulting in desire to learn about one's sero status.

The first VCT centre in the public service was established in 1999 at University Teaching Hospital (UTH), (NAC, Living Positively volume 1, 2004). In Zambia it is estimated that over 400,000 people had undergone VCT by December, 2003. In Chilonga, the VCT centre was established in 2001 and about 1,088 people have gone through VCT.

## **1.1 BACKGROUND INFORMATION**

Zambia is a developing country situated in the southern part of Africa, a region called sub-Sahara Africa. It covers an area of 752,612 square kilometers which is 2.5% area of Africa and is 1,300 meters above sea level. It is covered with woodland savannah, interspersed with lakes, rivers, hills, swamps and plains (DHS, 2001-2002).

The country is landlocked and surrounded by eight neighbouring countries namely; the Democratic Republic of Congo and Tanzania in the north, Malawi

and Mozambique in the east, Zimbabwe and Botswana in the south, Namibia and Angola in the west. The country is divided into nine provinces and seventy-three districts for administrative purposes, (CSO, 2003). The nine provinces are Central, Copper belt, Eastern, Luapula, Lusaka, Northern, Northwestern, Southern and Western. English is the official language of administration in Zambia.

According to the 2000 census, the population of Zambia is estimated at 10,285,631. Of the total, 5,070,891 are males while 5,214,740 are females. The growth rate for Zambia between 1990 -2000 was 2.9% as compared to 3.1% in 1980-1990. This shows that Zambia's average annual population growth rate declined by 6.4%. Copper belt province has the highest population followed by Lusaka, Northern, Southern and Eastern. Northwestern has the lowest followed by Western.

Northern Province is one of the nine provinces of Zambia. It has the total population of 834,286 inhabitants (CSO, 2000). The province has 12 districts and Mpika district is one of it. Mpika covers an area of about 4,000 square kilometers (km<sup>2</sup>). It is vast and the biggest district in Zambia. The vastness of the district compounded by the rough terrain makes the accessibility to health services very difficult by the Mpika community.

Mpika district shares national boundaries with Lundazi and Mambwe districts of Eastern province across the Luangwa River in the valley and with Kasama, Luwingu and Chilubi island district across the Chambeshi River in the west. These two big rivers are used as means of transport to connect Mpika with other districts. In the north, Mpika shares borders with Chinsali district and to the south lies Serenje district in Central province. Through Mpika district pass two major tarmac roads namely; the Great North Road from Kapiri-Mposhi to Dar-es-salaam in Tanzania and Mpika Kasama Road from Mpulungu port on Lake Tanganyika (Mpika DHMT Annual Report, 2004).



There is 623 km of gazetted road network and several ungazatted ones. Most of these roads have not been maintained in recent years and so are in a deplorable state with many gutters, galleys potholes and collapsed bridges rendering them impassible especially in the rainy season and hence the resultant difficulties in the delivery of health services.

The district has a total population of 152,852 with the annual growth rate of 3.4% (CSO, 2000). Like any other rural district in Zambia, about 70% of the populations live in the rural areas and 30% live in the peri-urban parts of the district. The population density is 3.7 inhabitants per square kilometers. People live in aggregate or scattered villages, which make the accessibility to health facilities difficult. Mpika also provides a transit point for people traveling between Zambia, Tanzania and the Democratic Republic of Congo (DRC), (Mpika DHMT Annual Report, 2004).

The district has twenty-one (21) health centres and two hospitals. The staff establishment level is inadequate in all health facilities mainly because of brain drain, being rural and deaths (Mpika DHMT Annual Report, 2004). Chilonga is one of the two hospitals in the district and it has a hospital Affiliated Health Centre.

Chilonga is situated 30 kilometers south of Mpika Township and 710 kilometers from Lusaka along the Great East Road, which is the main connection between Lusaka and Dar-er-salaam in Tanzania. Chilonga has a total population of 11,816 and 17 Neighbourhood Health Committees. The predominant tribe is Bemba though there are also Bisas from Nabwalya and Chiundaponde as well. Most people speak Bemba and few are able to speak English in some areas. The people are mostly small-scale farmers. The main crops grown are maize, finger millet, sorghums, cassava, sweet potatoes and Irish potatoes. There is also small-scale fishing.

The level of education is higher within the mission area, but low in far away villages. There are eight primary schools, three middle basic schools and a high school plus two community schools. There is also one nursing training school and one midwifery school. Illiteracy level is still high among elderly people especially in far away places.

The hospital is about 0.1 km away from the Great North Road. Chilonga is served by a tarmac road that links Lusaka, Kitwe and Kasama to Mpulungu as well as to Nakonde up to Dar-es-salaam in Tanzania. There is also Tanzania Zambia Railway Authority from Kapiri Mposhi to Nakonde then it proceeds to Dar-es-salaam. Most of the people use bicycles while others walk when coming to the health facility.

The main health problems in the area are; early marriages as a result of poverty so that the girl can be taken care of by the husband, there is early onset of sexual activities from boys and girls due to high dropout rate from school as they fail to repeat because of lack of financial support by parents and because of peer influence. The other health problem is the drinking habits. Men, women and youth are taking locally brewed beer and a few who can afford Mosi Lager. The effects are usually assaults from fighting as well as promiscuous behaviour. There are also quite a good number of sex workers in the nearby villages. Truck drivers are a contributing factor as sex workers patronize them when they stop over night, causing the spread of HIV in the community.

The problem of HIV/AIDS is a global concern and it transcends race, culture, occupation, gender and age. HIV/AIDS has become a major concern to people and the Zambian Government. AIDS infection is one of the top 10 killer diseases in both rural and urban areas (CSO, 2000). This led to the government through MoH to introduce VCT. "It is now advocated that VCT be replaced by Counseling, Testing and Care (CTC). This should be integrated and offered as a routine

service at all health centres and community settings with adequate facilities and infrastructure, trained personnel and functional capacity" (ZCC, 2003).

The goals of CTC are to; provide information on facts about HIV/AIDS, provide counseling as a routine service, provide testing for HIV and AIDS related illnesses, provide information on Sexually Transmitted Infections (STI) associated with HIV transmission, provide information on opportunistic infections associated with HIV/AIDS, provide reproductive health information, provide quality preventive and supportive care services, to promote risk reduction behaviours and to serve as an entry point to multiple intervention and care programmes (Zambia Counseling Council, 2003). Counseling Testing and Care is an entry point to partner notification, positive living, supportive counseling, PMTCT, community home based care, medical care and antiretroviral drugs, People living with HIV/AIDS (PLWHA) support groups, social and community networks, destigmatization of HIV/AIDS and orphan care and support (NAC, 2004).

The following are the benefits of Counseling, Testing and Care;

Improved health and medical treatment, informed decision making, psychosocial support and shared confidentiality (ZCC, 2003).

## **1.2 STATEMENT OF THE PROBLEM**

HIV/AIDS is a worldwide problem that has claimed millions of people who could have developed their communities, countries and the continent at large. To curb the prevalence of HIV/AIDS, government, non governmental, international organization and cooperating partners have devised ways of preventing the spread of HIV/AIDS and one of the ways is Voluntary Counseling and Testing (VCT). VCT stands for voluntary counseling and testing. It is based on the respect for the individual and the service provider's desire to help the client make an informed choice of counseling and be better equipped to make a decision to

pursue options such as pre-HIV- test counseling, HIV test, post-HIV- test counseling, and involvement in prevention and care activities.

For 15 years of existence of the Anti-AIDS Unit, Chilonga hospital has been offering HIV/AIDS counseling services for inpatients, blood donors and those coming for VCT. In Chilonga, about 1,083 people have accessed VCT services out of the 11,816 total population (Chilonga Annual Report, 2004).

The impact of HIV/AIDS on societies and economies is great. Life expectancy is falling. The impact of AIDS on life expectancy signifies a major blow to a society's development. The death toll is also rising. It is estimated that, between 2000 and 2020, 68 million people will die earlier than they would have in the absence of AIDS. The strong impact on mortality has been among children between ages of one and five. There is a major impact on households, which are dissolving as parents die, and children left as orphans to be taken care of by relatives who also cannot afford to care for them (UNAIDS, 2002). There is an impact on the health sector as well. Health care services face different levels of strain. There is an increase in total hospitalization related to HIV/AIDS, giving a negative impact on the overall quality of care provided. This has led to emergence of community rooted home care initiatives as a key coping mechanism for mitigating the impact. On education sector, loss of teachers directly affects the quality of education. HIV/AIDS also affects labour, setting back economic activity and social progress. However, national policies and poverty reduction strategies have been put in place.

Voluntary Counseling and Testing is important in controlling the HIV/AIDS epidemic. Most adult Zambians have never been tested for HIV. Although Zambia has called for multi-sectoral response to the problem, new infections are occurring everyday while those infected are re-infecting themselves.

The Demographic and Health Survey (DHS) of 2001-2002 reports that, only 8% of all adults have been tested. The low utilization of VCT facilities could be due to

the fear and the consequence of knowing one's HIV status, the stigma and the phobia of dying or relating every pain in the body to HIV/AIDS. Currently, 16% of the adult population aged 15-49 years is living with HIV/AIDS despite the numerous measures that have been put in place by the government such as; NAC establishment, provision of VCT centres, training counselors and provision of HIV/AIDS information through the media for people to utilize VCT services. The results are not encouraging in spite of government, non-governmental organizations and other cooperating partners taking a leading role in encouraging the Zambian people to go for VCT. Therefore, in this study, I would like to establish factors causing the people not to go for VCT.

### **1.3 FACTORS INFLUENCING LOW UTILIZATION OF VCT SERVICES AT CHILONGA HOSPITAL**

Several factors may influence the utilization of VCT services in Chilonga among the adult population. These factors may include the following:

#### **Service Factors**

The distance that many people have to walk to the health facility/VCT centre may affect utilization of VCT services. People near the VCT facility are more likely to use the services than those who have to walk long distances for VCT facilities, especially those who live in furthest villages of about 40-50 km. The other factor is availability of the VCT centre. This is likely to attract people to visit the centre and use the services while unavailability of the VCT centre contributes to non-utilization of the services.

The attitudes of VCT service providers may have an influence on the acceptance and use of the VCT services. Positive attitudes advertise the services available. Negative attitudes are likely to discourage people in need of the services.

The time spent at the health facility may either encourage or discourage individuals from utilizing the services, for example the length of time spent to be attended to may discourage them, while efficient services are well accepted. The maintenance of privacy by service providers during counseling may also

encourage while non maintenance of privacy may discourage clients to use the available services.

Information, education and communication (IEC) is key to knowledge that positively affects behaviour of an individual. Inadequate sensitization of the people about services available may contribute to low utilization of the services.

The other factor that may contribute to the utilization of VCT services is the availability of skilled counselors/services providers who are more likely to create a good impression to the clients by provision of quality services. The shortage of skilled service providers may contribute to negative attitudes of people towards the services provided and service providers.

The availability of ART may encourage people to utilize VCT services as people may feel that if tested positive they would be put on ART to prolong their lives while unavailability of ART may contribute to low utilization of the services by people who may feel that nothing will help their HIV status if tested positive.

### **Client Factors**

The educational level of an individual may have a bearing on VCT acceptance. Educated people are likely to utilize the services than individuals of low education level whom it is difficult to understand the need for knowing their HIV status.

The age of an individual may play a role. It has been observed that young people are not likely to volunteer to be tested for HIV despite being sexually active as they think they are young to be infected. Old people may also fail to utilize VCT services as they think that there is no need for them to know their HIV status as well as feeling uncomfortable to be counseled by counselors who are younger than them.

VCT services may be viewed as services for individuals who are about to be married. Married people are not likely to utilize the services for fear of marriage break up and sometimes they may require consent from their partner.

Positive attitudes of clients towards VCT services may motivate other clients to seek the services while negative attitudes towards these services and service providers may affect people to appreciate the services available.

### **Socio-cultural Factors**

Traditionally, it is a taboo to discuss sexual issues publicly and with people of the opposite sex and of different age group. Individuals who are rooted in traditions are less likely to utilize VCT services.

Peer pressure especially among adolescents may influence utilization of VCT services or not. Peers will influence each other either to utilize the services or not as a way of conforming to the group.

The other social factor is stigma. Fear of being stigmatized by the family or the public may affect utilization of VCT services. There is a tendency for the public to stigmatize people who are HIV positive, as a result, individuals may fear to test for their HIV status.

### **Economic Factors**

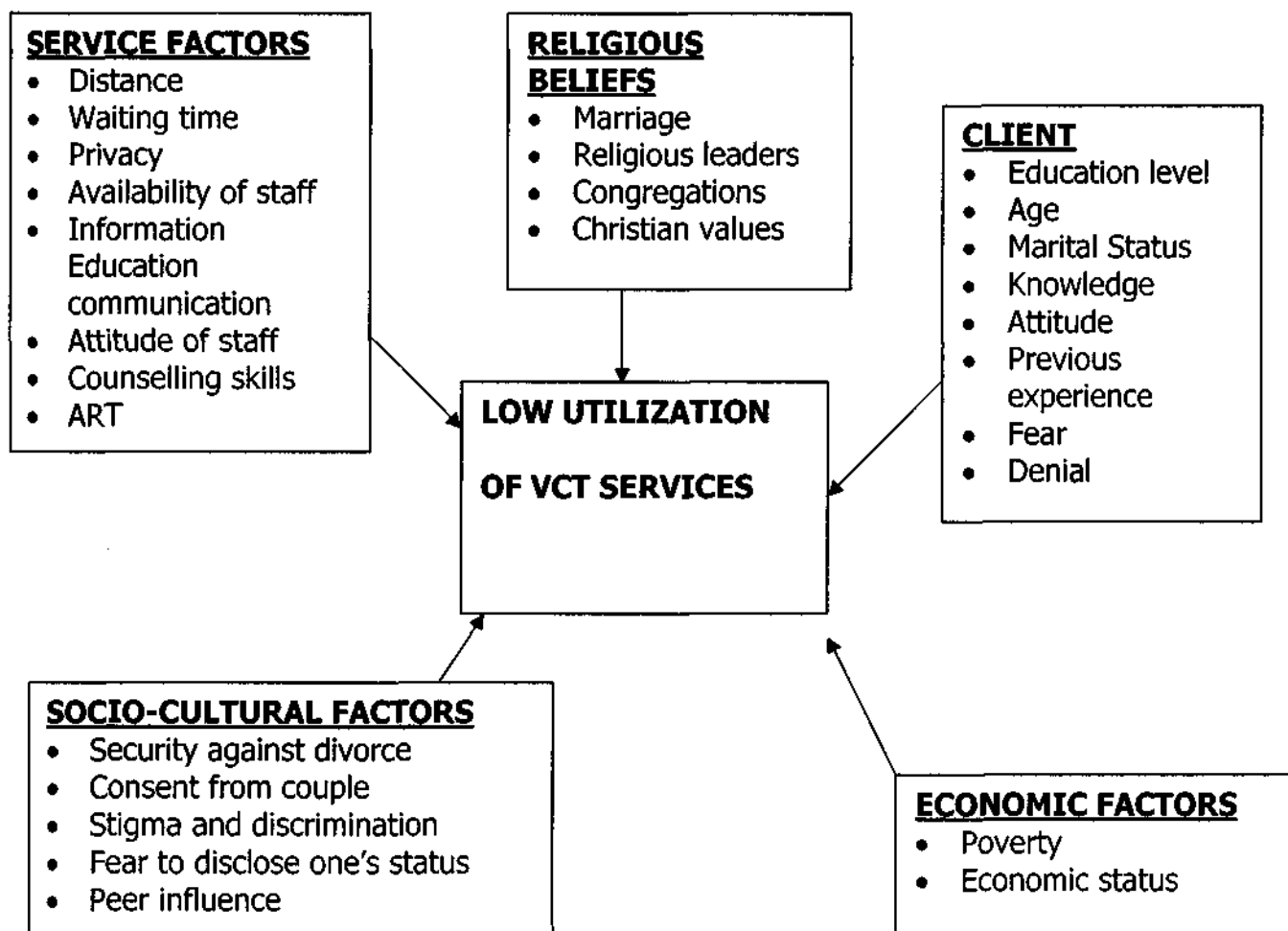
Economic status may influence an individual's health seeking behaviour including VCT services. People of Low economic status are less likely to go for VCT while well to do people are more likely because they are able to take measures to improve their health status if found with HIV.

### **Religious Factors**

The teaching of religious denominations may influence members to utilize VCT services. VCT is encouraged amongst couples intending to get married and some religious orders of the Catholic Church, VCT is one of requirements for joining the religious congregation.

## 1.4 DIAGRAM OF PROBLEM ANALYSIS

FIGURE 1: DIAGRAM ANALYSIS OF FACTORS INFLUENCING LOW UTILIZATION OF VCT SERVICES AT CHILONGA



## 1.5 JUSTIFICATION OF THE STUDY

This study seeks to determine the factors contributing to low utilization of VCT services at Chilonga. Chilonga has a VCT centre and nine (9) mobile VCT sites but only about 7% of the population has utilized the services (Chilonga Annual Report, 2004).



In view of the above, the researcher has been prompted to undertake a study in order to identify gaps in the existing services that may be contributing to the low utilization of VCT services. It is also hoped that the findings will be used in the formulation of policies, strategies and for evaluation of the existing ones to ensure maximum utilization of VCT services in Chilonga.

## **1.6 RESEARCH OBJECTIVES**

### **1.6.1 GENERAL OBJECTIVE**

To identify factors that contributes to low utilization of VCT services at Chilonga.

### **1.6.2 SPECIFIC OBJECTIVES**

1. To determine the levels of knowledge of HIV/AIDS among Chilonga residents.
2. To determine the levels of knowledge of VCT and awareness of available VCT sites.
3. To establish factors that influence utilization of VCT services.
4. To identify areas for further research and improvement.
5. To make recommendations and suggestions of the findings to relevant authorities.

## **1.7 RESEARCH HYPOTHESES**

### **HYPOTHESIS STATEMENTS**

1. Individuals who are aware of VCT services are likely to utilize the services than those who are not aware.
2. The knowledge and utilization of VCT services are related to the education level.
3. People of high economic status are more likely to be knowledgeable and utilize VCT services than people of low economic status.
4. The distance to the VCT centre encourage or discourage people from utilization of VCT facilities.

## 1.8 OPERATIONAL DEFINITIONS

These are the assigned meaning to variables and will describe the activities required to be measured in the research study.

1. Accessibility: The minimum cost, amount of time and waiting time to get the VCT services.
2. Attitude: A way of thinking, feeling and behaviour.
3. Care: "The provision of strategies designed to support and care for those who are directly or indirectly affected by HIV/AIDS and other chronic illnesses" (ZCC, 2003).
4. Client: Male or Female adult aged 16-49 years.
5. Confidentiality: Not giving information to people the client does not want to know about his/her HIV status results.
6. Counseling: "A process of dialogue and interaction aimed at facilitating understanding of the physical and psychosocial issues, problem solving and management of the clients' presenting concerns" (ZCC, 2003).
7. Counselor: A person who has been trained to counsel clients for HIV testing.
8. Educational level: The type of education attained that may influence behaviour attitudes towards VCT.
9. HIV (Human Immuno-deficiency Virus): A virus that causes AIDS.
10. Knowledge: Awareness of VCT services and availability.
11. Under utilization: The failure by individuals to use VCT services as the expected target population.
12. Utilization: The ability of people to use the available VCT services.
13. Testing: "The procedure for detecting the presence of disease causing organisms in the body of an individual to determine whether or not there is infection" (ZCC, 2003).

14. Voluntary HIV Counseling and Testing: This is obtaining HIV test after pretest counseling at one's own free will.
15. VCT Centre: This is a place where people go for pre-test -counseling for HIV testing at will.

## **1.9 RESEARCH STUDY VARIABLES**

"This is the quality, property or characteristics of persons, objects or phenomena that change or vary and can take different values" (Polit D. F, 2001). A variable is an attribute or characteristic that can have more than one value.

**1.9.1 INDEPENDENT VARIABLE:** "A variable that is believed to cause or influence the dependent variable, in experimental research, the manipulated variable" (Polit et al, 1999). The independent variable is that factor which is measured, manipulated, or selected by the researcher to determine its relationship to an observed phenomenon, which constitutes the dependent variable.

They include:

- Utilization
- Socio economic status
- Level of education
- Traditional/religious beliefs
- Distance
- Marital status
- Age
- Sex

**1.9.2 DEPENDENT VARIABLES:** "The dependent variable is that factor which is observed and measured to determine the effect on it of the independent variable" (Bless C, and Achola P, 1988). This is "a variable that is hypothesized to depend on or be caused by the independent variable"

(Polit D. F, 2001). These variables change as a result of manipulation of the independent variable. These include:

- Knowledge
- Awareness.

**TABLE1: VARIABLES AND CUT OFF POINTS**

VARIABLE	OPERATIONAL DEFINITION INDICATOR	SCALE OF MEASUREMENT	
		INDICATOR	CUT-OFF POINT (SCORES)
<b><u>Dependent</u></b> <b>Knowledge of HIV/ AIDS</b>	Having heard of HIV/AIDS, Able to mention HIV transmission mode	Adequate knowledge	6-10
	Unable to mention HIV transmission modes	Inadequate knowledge	0-5
<b>Awareness of VCT and Sites</b>	Able to explain VCT, where to get information about VCT and where to go for VCT.	Good	6-10
	Unable to explain	Poor	0-5
<b><u>Independent</u></b>  <b>Age</b>	16-20 years	Teenager	16-20
	21-35 years	Youth	11-15
	36-49 years	Adult	6-10
	Above 50 years	Old	0-5
<b>Sex</b>			Male
			Female
<b>Education</b>	Secondary level, advanced college or university	Literate	6-10
	No education up to grade seven	Illiterate	0-5
<b>Utilization of VCT services</b>	Walking to VCT Centre less than an hour, knowledge of availability of ART	Satisfactory	6-10
	Walking to VCT centre more than 2 hours, lacking knowledge of availability of ART	Unsatisfactory	0-5

## **CHAPTER 2**

### **2.0 LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

The Human Immunodeficiency Virus (HIV) continues to spread around the world, moving into communities previously little troubled by the epidemic and increasing in areas where AIDS is already the leading cause of death in adults. The major concentration of HIV infections is in the developing world, mostly in countries least able to afford care for infected people. The HIV/AIDS pandemic has become a health and developmental crises throughout much of sub-Saharan Africa, including Zambia. VCT is a key intervention for early access to prevention as well as to care and support services.

Zambia is determined to increase the number of people who know their HIV status as a way of scaling up the uptake of Anti-Retro Viral Therapy (ART). To meet this challenge, the government established the National HIV/AIDS/STI/TB council (NAC) to coordinate all HIV and AIDS activities in Zambia. One of the major efforts in creating the number of people who know their HIV status has been the establishment of the Zambia Voluntary Counseling and Testing Services (ZVCTS) in 1999 as a pilot project within 22 sites set up across the country over a period of three months. However, by the year 2002, ZVCTS embarked on an expansion of the services (NAC, 2003).

There have been few research studies conducted globally, regionally and on national level in an attempt to identify the gaps in the utilization of VCT services. Hence the limitations of this literature review. The low utilization of VCT centres is general, Zambia in particular. This literature review will focus on published and unpublished research studies that have been conducted globally, regionally and locally.

## **2.2 GLOBAL PERSPECTIVE**

There is need for VCT as HIV infection rates continue to rise. Estimates by the Joint United Nations programmes on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) indicate that the global infection toll to date is 85 million of which half are dead. It has also been estimated that 1 in 200 of all adults are already infected. Unless a cure is found, or life-prolonging therapy can be made more widely available, the majority of those now living with HIV will die within a decade. The virus continues to spread in about 1 new infection every 15 seconds (WHO, 2005).

The global strategy against AIDS has focused primarily upon prevention. Despite these important efforts, the numbers of persons infected continues to grow. In the industrialized world, AIDS rates are falling. In Western Europe, HIV infection rates appear to be dropping, with new infections concentrated among drug injecting in the southern countries, particularly Greece and Portugal. Antiretroviral drugs have accounted for low mother to child transmission. In North America 44,000 new HIV infections were reported in 2001 with half that number being in injection drug users. Mother to child transmission is as well rare. Although cases of HIV continue to rise in the industrialized world, the cases of AIDS are falling. This down turn is probably due to the new antiretroviral drug therapies which postpone the development of AIDS and prolong the lives of people living with HIV. In the United States in some disadvantaged sections of society, AIDS continue to rise. This is partly due to the inaccessibility of expensive drugs and to less successful prevention initiatives than in the predominantly well educated, well organized gay communities (UNAIDS, 2005).

Some developed countries have expressed concern about low utilization of VCT services. In Japan it was estimated that out of 14,000 who were HIV positive yet only 6,528 were reported to have undergone HIV testing.

Bangladesh's HIV/AIDS epidemic is classified as low level with only 13,000 living with HIV/AIDS. The first case was identified in 2001 (UNAIDS, 2005).

According to the population council study done in Kenya and Uganda in 2001, it indicates that youth would like to access HIV test and counseling services if the services are confidential, honest and inexpensive (UNAIDS, 2005).

As public awareness of HIV increases, so will public demand for VCT. According to Brown et al, 2001, Uganda is an example of an African country with relatively high demand for VCT.

A WHO/ UNAIDS report shows that by December 2001, a total of 11.8 million young people aged 15-24 years around the world were living with HIV/AIDS and that nine out of ten do not know that they are infected.

**TABLE 2: YOUNG PEOPLE AGED 15-24 YEARS LIVING WITH HIV/AIDS**

Countries/areas	Number	Female %	Male %
Industrialized countries	240,000	33%	67%
Latin America and Caribbean	560,000	31%	69%
CEE/CIS and Baltic States	430,000	35%	65%
Middle East of North Africa	160,000	41%	59%
East Asia and Pacific	740,000	49%	51%
South Asia	1,100,000	62%	38%
Sub-saharan Africa	8,600,000	67%	33%

Source: UNAIDS/UNICEF, 2001

A survey conducted by UNAIDS in 2002 in Kenya and Uganda indicated that 75% and 90% of young people would like to be tested while still healthy.

Despite the importance of VCT, in many countries fewer than 50% of people know where they can be tested for HIV. In Cambodia for example, only 16% know where to go for testing, in Zimbabwe only 2 out of 5 know where to be tested. Test kits are also unavailable in many of the countries affected by AIDS, which seriously undermines the effectiveness of counseling (UNAIDS, 2002).

## **2.3 REGIONAL PERSPECTIVE**

Several research studies have been done on many aspects of HIV/AIDS within sub-Saharan Africa, for example, a study conducted in Botswana by UNAIDS in 2000. The main objective of the study was to determine HIV prevalence and utilization of VCT centres in Botswana. The results of this study showed that the proportion of the adult population living with HIV has doubled over the last five years, with 43% of pregnant women in a major urban centre testing HIV-positive in 1999.

Over two-thirds of all people living with HIV in the world live in sub-Saharan Africa, accounting for 83% of the world's AIDS deaths. In general, West Africa has seen its rates of infection stabilize at much lower levels than east and southern Africa, where the virus is still spreading rapidly despite already high levels of infection. The majority of new infections continue to be concentrated in Eastern and Southern Africa, though no country is spared. In Botswana, Namibia, Swaziland and Zimbabwe current estimates indicate that between 20% and 26% of people aged 15-49 years are living with HIV or AIDS. In Central African Republic, Cote d'Ivoire, Djibouti and Kenya, at least one in ten adults is HIV-infected. In Rwanda, 28% of women attending antenatal clinics in major urban centres tested positive (UNAIDS, 1998).

In Burkina Faso (Bobodioulasso) and Cote d'Ivoire (Abidjan) a study on attitude of pregnant women towards HIV testing revealed that a total of 9,724 pregnant women were interviewed from January 1995 to September 1996. 92.4% of the women consented to HIV testing, Of these only 70.1% returned for the results. The reasons for refusal to be tested for HIV and failure to return for results were: failure to get partner's consent (49%), fear of AIDS (31%) and failure to make a decision at home (20%).



Less is known about HIV infection in North Africa or the Middle East than other parts of the world. Just over 200,000 people were estimated to be living with HIV in these countries which is under 1% of the world total (UNAIDS, 2003).

Southern African Developing Countries (SADC), have implemented VCT programmes. The southern African HIV/AIDS Action (SA) of March 2004 reported that Botswana is the first country to implement wide spread ARV drug programmes. Botswana has about 100,000 people eligible for ARV therapy but just fewer than 5,000 were put on treatment. Reasons for this discrepancy are not advanced. In Zambia, 3,258 people were reported to be living with AIDS despite the MoH launching an aggressive and vigorous campaign to make people aware about HIV/AIDS (SA, 2004).

## **2.4 NATIONAL PERSPECTIVE**

In Zambia, the HIV pandemic has mostly affected the most active group that is those aged between 15-49 years as shown in the table below.

**TABLE 3:**

### **HIV PREVALENCE AGES 15 TO 49 YEARS BY PROVINCE - 1998**

PROVINCE	PREVALENCE
Lusaka	27.3%
Copper belt	26.3%
Western	18.9%
Central	18.7%
Eastern	16.5%
Luapula	16.2%
Southern	15.7%
<b>Northern</b>	<b>13.5%</b>
Northwestern	11.7%

**Source MoH/CSO, 2002**

The National HIV/AIDS/STI/TB Council published that, 36,265 people attended VCT services in 2004 compared to 47,429 in 2003. This represents a 7% drop

from 2003. 35,326 HIV tests were done in 2004 compared to 27,348 in 2002. 23,353 people obtained VCT services in 2004 compared to 28,851 in 2003. The figures are expected to go up with the introduction of ART in health centres. The post-test services have continued to improve with more than 75% of clients able to collect their results the same day.

There is adequate information on the HIV prevalence and on those who have tested for HIV, but there is scanty literature pertaining to factors that contribute to the low utilization of VCT services. However, there has been some study to determine the attitude of women in childbearing age toward voluntary HIV testing in Lusaka (NAC, 2003). Results were not advanced.

The DHS 2001-2002 reports that 9% of men and 14% of women had ever been tested. Another 69% of women and 64% of men want to be tested but have not done so. The NAC also reports that testing is more common in urban areas (14% of women and 17% of men) than in rural areas (6% of women and 12% of men). VCT is also more common among the better educated.

It has been estimated that 16% of Zambia's adult population aged 15-49 years is living with HIV and at least 100 Zambians die everyday from AIDS (NAC report volume 1, 2004). The prevalence rate is two times higher in urban areas than in rural areas.

Many women do not know their HIV status. Out of those counseled at PMTCT sites, 48,000 (66%) women have been tested but only 300 partners have been counseled under PMTCT (1% of couples) (NAC, 2004).

A sexual behaviour survey conducted in 2003 revealed that respondents were asked whether they knew of a place they could go for an HIV test; whether they had been tested before and whether they had received their results. Though many knew of a place to get a test, few had actually been tested. Only 9.3% of

males and 8.5% of females had taken a test, although 75.8% of males and 68.7% of females knew a place to get tested.

To improve coverage, the NAC policy calls on government to make VCT services available to all people in the country. The NAC intervention strategic plan 2002-2005 indicates that VCT centres that are accessible and affordable should be established in all districts. The new goal is that at least 25% of adult sexually active Zambian knows their HIV status by 2005.

Literature review has shown that where VCT services have been fully utilized, there has been a reduction in HIV transmission in that those who have been found negative take preventive measures while those found to be HIV positive have an opportunity for further counseling, where they acquire knowledge of available medical care and support. They also make decisions concerning their lives (UNAIDS, 2004).

## **2.5 CONCLUSION**

The literature that has been reviewed show that no study has been done to describe factors that contribute to low utilization of VCT services. Most researches conducted are on efficiency of VCT services and HIV prevalence. Some researches have shown the discrepancy that exists between urban and rural, men and women as well as the educated and less educated. The provision of information remains a key role in the utilization of VCT services. This will enable people make decisions about knowing their HIV status. Knowledge of HIV status would be beneficial to the client and health institutions. Health institutions will be able to plan for appropriate care for the clients and clients will acquire more information on how to care for themselves.

## **CHAPTER 3**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Research Design**

"A research design is the researcher's overall plan for obtaining answers to the research questions or testing the research hypotheses" (Polit, D.F and Hungler, P.P, 1997). Research design includes research setting, operational definitions, assumptions, and relationships between variables, delimitations, sample and sampling procedures, instruments, approach to be used and the method for data analysis.

The purpose of this study was to find out the factors contributing to low utilization of VCT services as an intervention for HIV prevention by the male and female adults attending health services at Chilonga. Cross-sectional and non-interventional descriptive study with quantitative and qualitative approaches was used. "A descriptive study involves the systematic collection and presentation of data to describe or define characteristics of a phenomena or person as they naturally occur" (Polit and Hungler, 1997). In descriptive study the investigator observes, describes and documents aspects of the situation. "A cross sectional survey is 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). This research design has been found appropriate for the following reasons; the study raises fewer difficulty ethical issues as respondents are not subjected to unpleasant conditions, the approach involves systematic collection, analysis, presentation and interpretation of data in order to give a clear picture in regard to the study on the factors contributing to low utilization of VCT services at Chilonga. This study was less costly and time consuming. The study was aimed at describing factors that contribute to low utilization of VCT services, which was the core problem under study.

### **3.2 Research Setting**

"Research setting is the physical location and conditions in which data collection takes place in a study" (Polit and Hungler, 1997). The study was conducted at Chilonga hospital of Mpika district Northern Province of Zambia. "Chilonga has a population of 11,978" (CSO, 2000). It is a first level referral hospital with a Hospital Affiliated Health Centre. Chilonga has a VCT centre and recently opened 9 mobile VCT sites. Chilonga was chosen for the study because it was convenient and accessible. It is between urban and rural areas. There is a high social life among youths and adults. Most people are engaged in beer drinking as well as sexual activities. The contributing factors are truck drivers who stop over night as well as those who come to sell merchandise from towns.

### **3.3 Study Population**

The study population is "the entire number of units under study" (Treece and Treece, 1986). According to Polit and Hungler 1997 "A study population is an aggregate or totality of all subjects, objects or members that conform to a designated set of specification". The study population comprised of men and women who attended general Out Patient Department (OPD) at Chilonga from which a sample was drawn. The study population area was approximately 6,720 (56% of the total population of Chilonga. "The accessible population is the population of people available for a particular study, often a non random subject of the target Population" (Polit & Hungler, 2001). The accessible population was respondents from 15-49 years or above who attended OPD services regardless of sex. Also ten health professionals were included in the study.

### **3.4 Sample Selection**

A sample selection is "a process of selecting a number of individuals from the delineated target population in such a way that individuals in the sample represents as nearly as possible, the characteristics of the entire target population" (Dampsey and Dampsey, 1996). "Sampling is a process of selecting

a portion of a population to represent the entire population" (Polit et al, 1999). The target population was both male and female adults of Chilonga who attended General OPD services during the period of study. In order to represent a representative sample, the study was obtained from the target population of adults who were attending general OPD services at Chilonga during the period of study. Proportionate stratified sampling method was used to compute the sample. Stratification was according to sex.

#### **For computing the sample**

$$P = n/N$$

P = Total population

n = Sample size

N = Population size

Good sampling implies a well-defined population and an adequate chosen sample. Respondents who were interviewed were selected by systematic sampling method so as to select a smaller sample from a larger population.

The target size was 70; the total eligible population for inclusion totals 6,720, then 1 in 50 sampling ratio was selected. The sampling was started at a Random point between 1 and 5. This method was chosen as it is very simple and all adults had an equal chance of being included in the study. This enabled generalization of findings. It was also feasible in terms of time and resources.

### **3.5 Sample Size**

"A sample size is the number of subjects in a sample" (Polit and Hungler, 1997). In this study a total number of 70 respondents were selected. 50 respondents were interviewed and 20 were selected for Focus Group Discussion (FGD). Two FGDs were interviewed. The reason for selecting this size included limited time and inadequate financial, human and material resources.

### **3.6 Data Collection Tool**

"A data collection tool refers to an instrument or equipment used to gather information" (Polit and Hungler, 1997). Treece and Treece 1986, defined a data

collection tool as "an instrument or equipment used to collect data. It may take the form of questionnaire or interview schedule, checklist, projected device, or some other type of a tool for eliciting information". In this study, data was collected using a direct interview schedule. This is a semi-structured questionnaire with open and closed ended questions and space was provided for additional information or reasons for choice of the response. This method was chosen because most respondents were illiterate. Rephrasing the questions while retaining the same meaning did clarification of questions and answers.

The tool was chosen because it has a high response rate as well as being able to get the correct data contrary to mailed questions which might be misunderstood. It was also easy to test for validity and reliability. A Focus Group Discussion (FGD) guide also was also used to collect data. This was an in-depth interview with a small number of people about 1-12. This method was chosen because data was collected fast in the limited time given. It also allowed clarification of questions and that respondents were able to express themselves freely in their language. Richer information was obtained as there was chance to probe more. However, it was somehow difficult to collect sensitive information from certain individuals in a group.

### **3.7 Data Collection Technique**

"A data collection technique is a process that allow to systematically collect information about objects of the study (i.e. people, objects and phenomena) and the setting in which they occur" (Polit and Hungler, 1997). In this study a structured interview schedule and a FGD Guide was used as well as observation and asking key informants like the Executive Director and some counselors.

Permission was sought from respondents before conducting the interview or discussion. Then the interview or FGD was conducted in a natural setting at Chilonga health centre. Greeting each respondent/s and making them comfortable achieved this. The respondents were assured of privacy, confidentiality and anonymity by using serial numbers on each questionnaire. Icebreakers such as greetings were started with so as to make the respondents

comfortable and at ease. Thereafter, the purpose of the session was explained and then structured questions administered. The interviewer filled in the responses on behalf of the interviewee as the responses were being given. In case of clarification, the interviewer repeated questions so that the respondent understands it clearly. At the end of the interview, the interviewer thanked and reassured the respondents on confidentiality and how best their data will be used. Then the answered questionnaires were put in a bag. At the end of the session all the answered and the unanswered questionnaires were kept under locked cupboard.

### **3.8 Pilot Study**

"A pilot study is a small scale version of the actual study conducted with the purpose of testing and potentially refining the research plan" (Dampsey and Dampsey, 2000). The purpose of the pilot study was to find out how feasible the study was, how valid and reliable the data collection tools were and how possible it was to process and analyze the data collected. The pilot study tested the relevance and practicability of the newly developed data collection tool, it also enabled necessary adjustments to be made on the questionnaire before the major study. The Pilot study was conducted in the fourth week of August at Kaole health post. Five (5) adults were selected by stratified random sampling method. The direct semi-structured questionnaire was used to collect data.

This study setting was chosen for the pilot study as it had similar characteristics with the actual study place or area. The pilot study was useful in knowing the accessibility of questionnaires e.g. questions relating to sexuality which might not be answered easily and in estimating how much time was required to sample participants.

### **3.9 Validity**

"Validity is the degree to which an instrument measures what it is intended to measure" (Polit et al, 1999). Essentially validity is concerned with the question, are you measuring what you think you are measuring? Making questions



simple, concise and brief ensured the validity of the instruments used in this study. Then all variables related to aspects of knowledge on VCT and service related as well as demographic related factors were included in the questionnaire. The research supervisor went through the research tool to ensure that no important item was missed. Then data was analyzed and interpreted according to the findings of the research study and presented as aggregate results.

### **3.10 Reliability**

"Reliability is the degree of consistency and dependability with which an instrument measures the attribute it is designed to measure" (Polit et al, 1999). Reliability was obtained by testing the tools before the main study was conducted. The results from the pilot study were used as baseline data. Administering the same questionnaire throughout the study also upheld reliability

### **3.11 Ethical and Cultural Considerations**

"Ethics are a set 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 et al, 1999). The general accepted ethical rights of participants the investigator respected include privacy, confidentiality, anonymity and voluntary participation. Written permission was sought from Post Basic Nursing Department and Chilonga Hospital Management Team for pilot and actual study. Permission was sought from University of Zambia Research Ethics Committee as well. Verbal consent was obtained from each respondent before conducting the interview and administering the questionnaires. The respondents were treated with respect by greeting and talking to them politely. They were interviewed in their local language.

## **CHAPTER 4**

### **4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS**

#### **4.1 DATA ANALYSIS**

"Data analysis is the systematic organization and synthesis of research data and the testing of research hypotheses using those data" (Polit and Hungler, 2001). The raw data that was collected was sorted out and then grouped into categories. The questionnaires were edited for completeness, uniformity, accuracy and consistency and then coded.

The responses from closed-ended questions were entered on the data master sheet, while responses from open-ended questions and Focus Group Discussions were categorized according to major themes and then coded. Data was analyzed manually by single counting and use of a calculator.

#### **4.2 PRESENTATION OF FINDINGS**

The findings of the study are presented in frequency tables, percentages, bar graphs and pie charts. The use of graphs and bar charts in the presentation of findings makes the work presentable and easy to read and understand.

The frequency tables summarized the results of the study to enable readers understand the findings of the research study. Cross tabulation of variables help to show clearly the relationship between the variables. These enabled the researcher to draw meaningful inferences. The findings from this study were presented according to the sequence of questions and sections in the questionnaire.

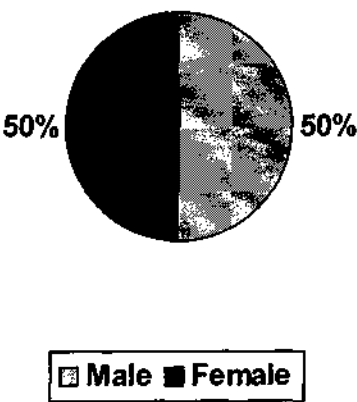
**SECTION A****TABLE 4: DEMOGRAPHIC DATA**

<b>VARIABLES</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
<b>Sex:</b>		
Males	25	50
Female	25	50
Total	<b>50</b>	<b>100</b>
<b>AGE IN YEARS</b>		
16-20	6	12
31-35	30	60
36-49	12	24
Above 50	2	4
Total	<b>50</b>	<b>100</b>
<b>MARITAL STATUS</b>		
Single	18	36
Married	30	60
Widowed	0	0
Divorced	2	4
Total	<b>50</b>	<b>100</b>
<b>RELIGIOUS DENOMINATION</b>		
Catholic	32	64
UCZ	8	16
SDA	5	10
Others	5	10
Total	<b>50</b>	<b>100</b>
<b>EDUCATION LEVEL</b>		
None	2	4
Grade 1-7	6	12
Grade 8-9	17	34
Grade 10 –12	9	18
College	15	30
University	1	2
Total	<b>50</b>	<b>100</b>
<b>SOURCE OF LIVELIHOOD</b>		
Farming	20	40
Business	9	18
Employed	21	42
Total	<b>50</b>	<b>100</b>

Table 1 show that there were 25 (50%) female and 25 (50%) male respondents. The majority of the respondents 30 (60%) were aged between 21-35 years (youth) followed by 12 (24%) aged between 36-49 years (adults). The highest numbers 30 (60%) of respondents were married and mostly, 32 (64%) were Catholics.

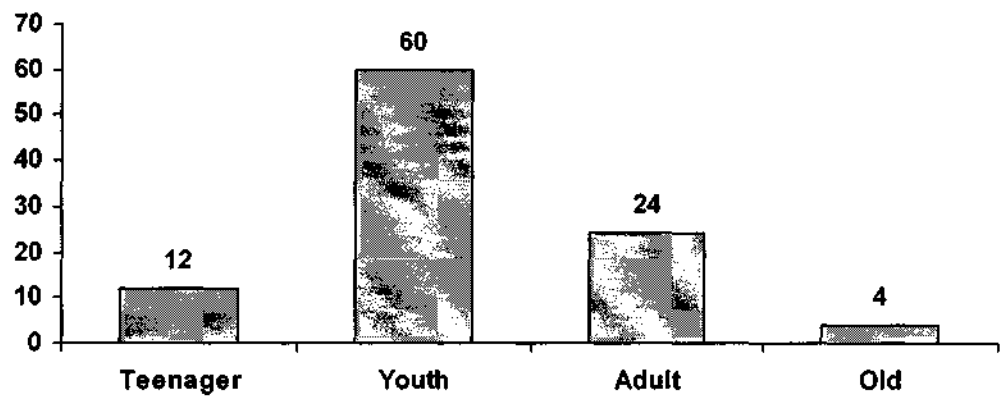
Most respondents 17 (34%) attained junior secondary level of education with 15 (30%) who attained college level. There were also 2 (4%) who had never been to school. The majority of respondents 21 (42%) and 20 (40%) were in formal employment and subsistence farming respectively.

**Figure II: RESPONDENT'S SEX CHARACTERISTICS**



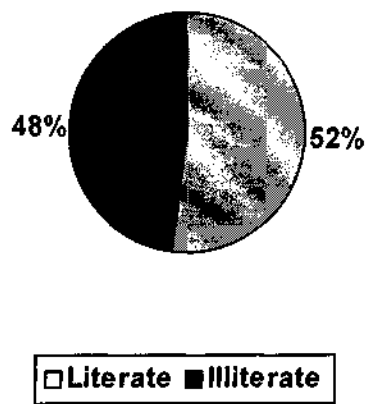
The figure shows that there were 25 (50%) male and 25 (50%) female respondents.

**Graph 1: RESPONDENTS' AGE CHARACTERISTICS**



The graph below shows that the majority of respondents were youths 30 (60%) followed by adults 12 (24%).

**Figure III: RESPONDENT'S LITERACY LEVEL**



The figure shows that 26 (52%) of respondents were illiterate while 24 (48%) were literate.

**SECTION B: KNOWLEDGE ON HIV/AIDS**

**TABLE 5: RESPONDENTS HAVING HEARD OF HIV/AIDS**

HEARD OF HIV/AIDS	1.1.1 FREQUENCY	RELATIVE FREQUENCY
Yes	50	100
No	0	0
Total	50	100

All respondents 50 (100%) had heard of HIV/AIDS.

**TABLE 6: SOURCE OF HIV/AIDS INFORMATION**

INFORMATION ON HIV/AIDS HEARD FROM	1.1.2 FREQUENCY	RELATIVE FREQUENCY
Radio/TV	27	54
Books/Pamphlets	17	34
Relatives/Friends	17	34
Health worker	48	96
Drama/Church	3	6
TOTAL DOES NOT ADD TO 100 DUE TO MULTIPLE RESPONSES		

The majority of the respondents 48 (96%) heard about HIV/AIDS from the health workers while 27 (54%) heard from the radio/television with 17 (34%) hearing from books/pamphlets and relatives/friends.

**TABLE 7: DEFINITION OF HIV/AIDS**

WHAT IS HIV/AIDS	FREQUENCY	RELATIVE FREQUENCY
A virus lowering the immunity causing AIDS	29	58
A deadly disease	21	42
Total	50	100

The majority 29 (58%) of the respondents gave a correct definition of HIV/AIDS while 21 (42%) gave a correct but an incomplete definition of HIV/AIDS.

**TABLE 8: RESPONDENT'S PERCEPTION OF HOW COMMON HIV/AIDS IS IN ZAMBIA**

EXISTENCE OF HIV/AIDS IN ZAMBIA	FREQUENCY	RELATIVE FREQUENCY
It does not exist	0	0
Not common	0	0
Fairly common	8	16
Very common	42	84
<b>Total</b>	<b>50</b>	<b>100</b>

The majority of the respondents 42 (84%) perceived HIV/AIDS to be very common while 8 (16%) perceived it to be fairly common in Zambia.

**TABLE 9: RESPONDENT'S KNOWLEDGE OF HIV TRANSMISSION**

TRANSMISSION OF HIV	FREQUENCY	RELATIVE FREQUENCY
Sexual Intercourse	49	98
Breathing infected air	1	2
Pregnant mother to unborn child	45	90
Using same cups, plates, toilet	2	4
Breast feeding	40	80
Other: screened blood	9	18
<b>TOTAL DOES NOT ADD TO 100 DUE TO MULTIPLE RESPONSES</b>		

The majority 49 (98%) of respondents stated that HIV is transmitted by sexual intercourse while 2 (4%) stated using same cups, plates, and toilet transmits it.

**TABLE 10: RESPONDENTS HAVING A RELATIVE/FRIEND INFECTED**

HAVE HAD A RELATIVE/FRIEND INFECTED WITH HIV	FREQUENCY	RELATIVE FREQUENCY
Yes	50	100
No	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

All respondents 50 (100%) stated having a relative/or a friend infected with HIV/AIDS.

**TABLE 11: REACTION OF RESPONDENT’S FAMILY/FRIENDS TOWARDS THEIR HIV INFECTED PERSON**

<b>WHAT WAS THE REACTION OF HIS/HER FAMILY/FRIENDS</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Neglected the patient	8	16
Supportive	32	64
Very supportive	10	20
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 32 (64%) of respondent’s family or friends was supportive to their HIV infected patients.

**SECTION C: OPINION ON HIV/AIDS**

**TABLE 12: RESPONDENTS HAVING HEARD OF HIV VCT**

<b>HAVING HEARD OF HIV VCT</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
YES	50	100
NO	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

All 50 (100%) respondents had heard of Voluntary HIV Counseling and Testing.

**TABLE 13: RESPONDENT’S SOURCE OF INFORMATION ON HIV VCT**

<b>SOURCE OF INFORMATION ON HIV VCT</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Radio/TV	27	54
Books/Pamphlets	17	34
Health workers	48	96
Relative/friends	17	34
Other: Church	3	6
<b>TOTAL DOES NOT ADD TO 100 DUE TO MULTIPLE RESPONSES</b>		

The majority 48 (96%) of respondents obtained information on HIV VCT from health workers, while 27 (54%) from Radio/TV.



**TABLE 14: RESPONDENTS KNOWLEDGE OF VCT SERVICES**

<b>KNOWLEDGE ABOUT VCT No. = 40</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Knowledgeable	32	64
Little knowledgeable	18	36
First heard the term	0	0
Not knowledgeable	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 32 (64%) of the respondents were knowledgeable of VCT services with 18 (36%) having little knowledge.

**TABLE 15: RESPONDENT'S WILLINGNESS TO BE TESTED FOR HIV**

<b>WOULD LIKE TO HAVE AN HIV TEST (No. =80)</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Yes	40	80
No	10	20
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 40 (80%) of the respondents were willing to be tested for HIV.

**TABLE 16: REASONS GIVEN BY RESPONDENTS FOR THEIR  
WILLINGNESS TO HAVE AN HIV TEST**

<b>REASONS TO HAVE AN HIV TEST</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
To know the health status	30	60
To plan for the future	4	8
For treatment	6	12
<b>Total</b>	<b>40</b>	<b>80</b>

Total does not add to 100 due to alternative response.

The majority 30 (60%) of the respondents stated that they would like to be tested for HIV in order to know their health status while 6 (12%) stated the need to be put on treatment.

**TABLE 17: REASONS GIVEN BY RESPONDENTS WHO WERE UNWILLING TO HAVE AN HIV TEST**

<b>REASONS FOR NOT WANTING TO HAVE AN HIV TEST (No. = 10)</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Fear to die early	5	10
Staff no confidentiality	3	6
Can live positively with the knowledge heard on HIV/AIDS	1	2
No sexual partner	1	2
<b>Total</b>	<b>10</b>	<b>20</b>

5 (10%) of the respondents stated fear to die early as a reason for not wanting to have an HIV test while 3 (6%) stated that staff had no confidentiality.

**TABLE 18: WHO RESPONDENT CAN TELL IF RESULTS ARE POSITIVE**

<b>IF RESULTS ARE POSITIVE WHO THEY WOULD TELL</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
No. = 40		
Spouse	26	52
Father	22	44
Mother	20	40
Brother/sister	13	26
Friend	9	18
Nobody	6	12
<b>TOTAL DOES NOT ADD TO 100 DUE TO MULTIPLE RESPONSES</b>		

The majority 26 (53%) of the respondents would like to tell their spouses if results were positive while 6 (12%) would tell nobody.

**TABLE 19: RESPONDENT'S REASONS FOR TELLING HIV POSITIVE RESULTS**

<b>REASONS FOR TELLING THEM THE HIV POSITIVE RESULT</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
<b>No. 40</b>		
To know also as they will care for me when sick	17	34
To support me physically financially, spiritually	12	24
To reduce stigma and discrimination	5	10
To live positively together	5	10
He is the head of the house	1	2
<b>TOTAL DOES NOT ADD TO 100 DUE TO ALTERNATIVE RESPONSES</b>	<b>40</b>	<b>80</b>

Majority of the respondents 17 (34%) would reveal their HIV positive result so that the people who will be caring for her/him when sick also know.

**TABLE 20: REASONS FOR PEOPLE'S UNWILLINGNESS TO BE TESTED FOR HIV**

<b>REASNS FOR PEOPLES UNWILLINGNESS TO BE TESTED</b>	<b>FREQUENCY</b>	<b>RELATIVE FREQUENCY</b>
Fear to die early	25	50
Stigma and discrimination	9	18
Lack of knowledge/ignorance	7	14
Staff no confidentiality	7	14
Fear to be divorced	2	4
<b>Total</b>	<b>50</b>	<b>100</b>

25 (50%) of the respondents stated fear to die early as the reason for their unwillingness to be tested for HIV while 9 (18%) stated stigma and discrimination.

## SECTION D – SERVICE RELATED FACTORS

**TABLE 21: RESPONDENTS WITH A VCT CENTRE IN THEIR COMMUNITY**

A VCT CENTRE IN RESPONDENTS COMMUNITY	FREQUENCY	RELATIVE FREQUENCY
Yes	50	100
No	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

All 50 (100%) respondents stated that they have a VCT centre in their community.

**TABLE 22: RESPONDENT'S TIME TAKEN TO GET TO THE VCT CENTRE**

TIME TABLE TO GET TO THE VCT CENTRE	FREQUENCY	RELATIVE FREQUENCY
Less than 30 minutes	37	74
½ - 1 hour	12	24
1-2 hours	1	2
2-3 hours	0	0
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 37 (74%) of the respondents took less than 30 minutes to get to the VCT centre while 12 (24%) took ½ - 1 hour.

**TABLE 23: AVAILABILITY OF ARV DRUGS AT THE VCT CENTRE**

AVAILABILITY OF ARVS	FREQUENCY	RELATIVE FREQUENCY
Always	11	22
Sometimes	12	24
Never	27	54
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 27 (54%) of the respondents stated none availability of ARV at the VCT centre.

**TABLE 24: RECEPTION OF THE STAFF MEMBERS AT THE VCT CENTRE**

RECEPTION OF THE STAFF MEMBERS AT THE VCT CENTRE	FREQUENCY	RELATIVE FREQUENCY
Poor	7	14
Fair	9	18
Good	28	56
Very good	6	12
<b>Total</b>	<b>50</b>	<b>100</b>

Majority of the respondents 28 (56%) stated good attitude while 7 (14%) stated that attitudes were poor.

**TABLE 25: TIME SPENT AT THE VCT BEFORE BEING ATTENDED TO**

TIME SPEND AT THE VCT BEING ATTENDED TO	FREQUENCY	RELATIVE FREQUENCY
½ - 1 hour	35	70
1-2 hours	13	26
2-3 hours	2	4
<b>Total</b>	<b>50</b>	<b>100</b>

The majority 35 (70%) of the respondents waited for ½-1 hours at the VCT centre to be attended to while only 2 (4%) waited 2-3 hours.

**TABLE 26: ATTITUDE OF HEALTH WORKERS TOWARDS HIV/AIDS PATIENTS**

ATTITUDE OF HEALTH WORKERS TOWARDS HIV/AIDS PATIENTS	FREQUENCY	RELATIVE FREQUENCY
Bad	1	2
Fair	17	34
Good	26	52
Very good	6	12
<b>Total</b>	<b>50</b>	<b>100</b>

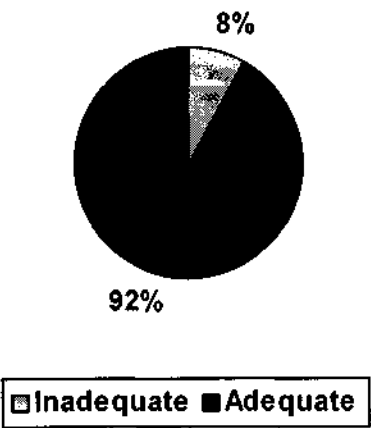
The majority 26 (52%) of the respondents stated that staff attitude towards HIV patients was good while 1 (2%) stated that it was negative.

**TABLE 27: RESPONDENT’S RESPONSE IF HIV CAN BE TREATED**

CAN HIV BE TREATED	FREQUENCY	RELATIVE FREQUENCY
Yes	1	2
No	49	98
Total	50	100

The majority 49 (98%) of the respondents stated that HIV couldn’t be treated/cured while 1 (2%) stated that it could be treated.

**FIGURE IV: RESPONDENT’S KNOWLEDGE ON HIV/AIDS**



The Majority 46 (92%) of the respondents had adequate knowledge on HIV/AIDS.

**TABLE 28: RESPONDENTS' SEX IN RELATION TO KNOWLEDGE OF HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	SEX		TOTAL
	MALE	FEMALE	
Inadequate	3 (12%)	1 (4%)	4 (8%)
Adequate	22 (88%)	24 (96%)	46 (92%)
<b>Total</b>	<b>25 (50%)</b>	<b>25 (50%)</b>	<b>50 (100%)</b>

Majority of females 24 (98%) had adequate knowledge about HIV/AIDS while only 1 (4%) had inadequate knowledge.

**TABLE 29: RESPONDENTS' AGE IN RELATION TO KNOWLEDGE ON HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	AGE OF RESPONDENT IN YEARS				TOTAL
	16-20	21-35	36-49	+50	
Inadequate	1 (17%)	3 (10%)	0	0	4 (8%)
Adequate	5 (83%)	27 (90%)	12 (100%)	2(100%)	46 (92%)
<b>Total</b>	<b>6 (12%)</b>	<b>30 (60%)</b>	<b>12 (24%)</b>	<b>2 (4%)</b>	<b>50 (100%)</b>

Majority of respondents 27 (90%) between 21-35 years, and 12 (100%) between 36-49 years old had adequate knowledge on HIV/AIDS.

**TABLE 30: RESPONDENTS' MARITAL STATUS IN RELATION TO KNOWLEDGE ON HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	RESPONDENT'S MARITAL STATUS				TOTAL
	SINGLE	MARRIED	WIDOWED	DIVORCED	
Inadequate	3 (18%)	1 (3%)	0	0	4 (8%)
Adequate	14(82%)	30 (97%)	0	2 (100%)	46 (92%)
<b>Total</b>	<b>17 (34%)</b>	<b>31(62%)</b>	<b>0</b>	<b>2(4%)</b>	<b>50(100%)</b>

Majority of married respondents 30 (97%) and all divorced ones 2 (100%) had adequate knowledge on HIV/AIDS.

**TABLE 31: RESPONDENT'S RELIGIOUS DENOMINATION IN RELATION TO KNOWLEDGE ON HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	RESPONDENTS' RELIGIOUS DENOMINATION				TOTAL
	CATHOLIC	UCZ	SDA	OTHER	
Inadequate	2 (6%)	2 (25%)	0	0	4 (8%)
Adequate	30 (94%)	6 (75%)	5 (100%)	5 (100%)	46 (92%)
<b>Total</b>	<b>32 (64%)</b>	<b>8 (16%)</b>	<b>5 (10%)</b>	<b>5 (10%)</b>	<b>50 (100%)</b>

Majority of Catholics 30 (94%) and 5 (100%) SDA had adequate knowledge on HIV/AIDS.

**TABLE 32: RESPONDENT'S EDUCATIONAL LEVEL IN RELATION TO KNOWLEDGE ON HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	RESPONDENT'S EDUCATIONAL LEVEL						TOTAL
	None	Grade 7	Grade 8-9	Grade 10-12	College	University	
Inadequate	1 (50%)	2 (33%)	1 (6%)	0	0	0	4 (8%)
Adequate	1 (50%)	4 (67%)	16 (94%)	9 (100%)	15 (100%)	1 (100%)	46 (92%)
<b>Total</b>	<b>2 (4%)</b>	<b>6 (12%)</b>	<b>17 (34%)</b>	<b>9 (18%)</b>	<b>15 (30%)</b>	<b>1 (2%)</b>	<b>50 (100%)</b>

Majority 16 (94%) of grade 8-9 and 15 (100%) of respondents with college education had adequate knowledge on HIV/AIDS.

**TABLE 33: RESPONDENT'S SOURCE OF LIVELIHOOD IN RELATION TO KNOWLEDGE ON HIV/AIDS**

KNOWLEDGE ON HIV/AIDS	RESPONDENT'S SOURCE OF LIVELIHOOD			TOTAL
	Farming	Business	Employment	
Inadequate	2 (10%)	1 (11%)	1 (5%)	4 (8%)
Adequate	18 (90%)	8 (89%)	20 (95%)	46 (92%)
<b>Total</b>	<b>20 (40%)</b>	<b>9 (18%)</b>	<b>21 (42%)</b>	<b>50 (100%)</b>

Majority of employed 20 (95%) and those involved in farming 18 (90%) had adequate knowledge on HIV/AIDS.



**TABLE 34: WILLINGNESS TO BE TESTED FOR HIV IN RELATION TO SEX**

<b>WILLINGNESS TO HAVE AN HIV TEST</b>	<b>REONDENT'S SEX</b>		<b>TOTAL</b>
	<b>Male</b>	<b>Female</b>	
Yes	21 (84%)	19 (76%)	40 (80%)
No	4 (16%)	6 (24%)	10 (20%)
<b>Total</b>	<b>25 (50%)</b>	<b>25 (50%)</b>	<b>50 (100%)</b>

The majority 21 (84%) male and 19 (76%) female respondents were willing to have an HIV test, while 6 (24%) females were not willing.

**TABLE 35: WILLINGNESS TO BE TESTED FOR HIV IN RELATION TO RESPONDENT'S AGE**

<b>KNOWLEDGE ON HIV TEST</b>	<b>RESPONDENT'S AGE IN YEARS</b>				<b>TOTAL</b>
	<b>16-20</b>	<b>21-35</b>	<b>36-49</b>	<b>+50</b>	
Yes	4 (67%)	24 (80%)	11 (92%)	1 (50%)	40 (80%)
No	2 (33%)	6 (20%)	1 (18%)	1 (50%)	10 (20%)
<b>Total</b>	<b>6 (12%)</b>	<b>30 (60%)</b>	<b>12 (24%)</b>	<b>2 (4%)</b>	<b>50 (100%)</b>

The majority of respondents 24 (80%) age 21-35 were willing to undergo an HIV test while 6 (20%) in the same age group were not willing.

**TABLE 36: WILLINGESS TO BE TESTED IN RELATION TO RESPNDENT'S MARITAL STATUS**

<b>WILLINGNESS TO HAVE AN HIV TEST</b>	<b>RESPONDENT'S MARITAL STATUS</b>				<b>TOTAL</b>
	<b>Single</b>	<b>Married</b>	<b>Widowed</b>	<b>Divorced</b>	
Yes	12 (71%)	26 (84%)	0	2 (100%)	40 (80%)
No	5 (29%)	5 (16%)	0	0	10 (20%)
<b>Total</b>	<b>17 (34%)</b>	<b>31 (62%)</b>	<b>0</b>	<b>2 (4%)</b>	<b>50 (100%)</b>

Majority 26 (84%) of married respondents were willing to have an HIV test.

**TABLE 37: WILLINGNESS TO BE TESTED FOR HIV IN RELATION TO EDUCATION LEVEL**

<b>KNOWLEDGE ON HIV/AIDS</b>	<b>RESPONDENT'S EDUCATIONAL LEVEL</b>						<b>TOTAL</b>
	<b>None</b>	<b>Grade 7</b>	<b>Grade 8-9</b>	<b>Grade 10-12</b>	<b>College</b>	<b>University</b>	
<b>Yes</b>	1 (50%)	2 (33%)	15 (88%)	9 (100%)	13 (87%)	0	40 (80%)
<b>No</b>	1 (50%)	4 (67%)	2 (12%)	0	2 (13%)	1 (100%)	10 (20%)
<b>Total</b>	<b>2 (4%)</b>	<b>6 (12%)</b>	<b>17 (34%)</b>	<b>9 (18%)</b>	<b>15 (30%)</b>	<b>1 (2%)</b>	<b>50 (100%)</b>

Majority of grade 8-9, 15 (88%) and grade 10-12 (100%) of respondents were willing to have HIV test while majority of grade 1-7, 4 (67) were not willing.

**TABLE 38: WILLINGNESS TO BE TESTED FOR HIV IN RELATION TO RESPONDENT'S SOURCE OF LIVELIHOOD**

<b>WILLINGNESS TO HAVE AN HIV TEST</b>	<b>RESPONDENT'S SOURCE OF LIVELIHOOD</b>			<b>TOTAL</b>
	<b>Farming</b>	<b>Business</b>	<b>Formal employment</b>	
<b>Yes</b>	15 (75%)	7 (78%)	18 (86%)	40 (80%)
<b>No</b>	5 (25%)	2 (22%)	3 (14%)	10 (20%)
<b>Total</b>	<b>20 (40%)</b>	<b>9 (18%)</b>	<b>21 (42%)</b>	<b>50 (100%)</b>

Majority of respondents 18 (86%) who were employed were willing to have an HIV test followed by 15 (75%) those in business.

**TABLE 39: LEVEL OF KNOWLEDGE ON HIV/AIDS IN RELATION TO WILLINGNESS TO HAVE AN HIV TEST**

WILLINGNESS TO HAVE AN HIV TEST	LEVEL OF KNOWLEDGE ON HIV/AIDS		TOTAL
	Adequate knowledge	Inadequate knowledge	
Yes	43 (93%)	3 (7%)	46 (92%)
No	3 (7%)	1 (25%)	4 (8%)
<b>Total</b>	<b>46 (92%)</b>	<b>4 (8%)</b>	<b>50 (100%)</b>

The respondents 43 (93%) who were willing to have an HIV test had adequate knowledge on HIV.

**TABLE 40: RESPONDENT'S RECOMMENDATIONS**

RESPONDENT'S RECOMMENDATION	FREQUENCY	RELATIVE FREQUENCY
Train youth counselors as well	3	6
Services are satisfactory continue	18	36
Available counselors to be motivated	2	4
Sensitize the community on VCT & ART	5	10
Increase number of counselors	4	8
Increase VCT mobile centres	2	4
Improve on confidentiality	8	16
Train doctors, tutors and HIV/AIDS patients as counselors	1	2
Staff to change bad attitudes	7	14
<b>Total</b>	<b>50</b>	<b>100</b>

Majority 18 (36%) of respondents recommended that services are satisfactory and that they should be continued followed by 8 (16%) respondents who recommended improving on confidentiality.

## **CHAPTER 5**

### **5.0 DISCUSSION AND INTERPRETATION OF FINDINGS AND IMPLICATIONS FOR THE HEALTH CARE SYSTEM**

#### **5.1 INTRODUCTION**

The study was done to determine the factors influencing low utilization of voluntary HIV Counseling and Testing services in Chilonga. The researcher was prompted to do this study because of the low number of people going for VCT. The sample consisted of seventy (70) subjects who were conveniently selected for interviews and FGDs. Fifty (50) were selected for interviews and twenty (20) were selected for FGDs. The findings of the study are, therefore, based on the responses of the subjects who were selected, interviewed and participated in the study. The study revealed some significant information on knowledge about HIV/AIDS, and opinion on HIV/AIDS VCT services and the factors that determine the utilization of VCT. The chapter looks at interpretation and discussion on these findings as well as examining the implications of the findings within a broader context.

#### **5.2 CHARACTERISTICS OF THE SAMPLE**

The study consisted of 50 study subjects who attended general OPD at Chilonga Hospital, Mpika. 25 (50%) were males and 25 (50%) were females. These were selected in order to have a stratified sample according to sex. The respondents' ages ranged between 16 to 50 years. The majority of the respondents 30 (60%) were in the age group of 16-35 (youths). This suggests that Zambia has higher proportion of younger persons in the general population. The least 2 (4%) of the respondents were in the age group of above 50 years, followed by 6 (12%) in the age group of 16-20 years (teenagers). This is due to the fact that youths are usually active and healthier so that they do not usually seek medical attention unless they are very ill. The above 50 years are also healthier except for minor ailments that are attributed to old age.

Under the marital status, the majority were mainly married 31 (62%), 17 (34%) were single and 2 (4%) were divorced. This is a true reflection for the majority of married participants since high value is placed on marriage in Zambian society. Marriage usually takes place between 21-35 years. This could be due to the fact that most respondents were within the active reproductive age 15-49 years. This correlates with the findings by CSO (2001-2002) that 61% females and 58% men of the Zambian population are married. It was revealed that the majority of the respondents 32 (64%) were Catholics. This could be attributed to the fact that the Catholic mission runs the hospital and people in the area are predominantly Catholics.

The respondent's educational background ranged from none to university. The majority of the respondents 17 (34%) had attained Basic Education that is up to grade 9 followed by 15 (30%) who attained college level. This could be attributed to the fact that Basic Education is being encouraged in Zambia and that there are schools and colleges around which are run by the Catholic church and the Government. Despite the availability of educational facilities, 2 (4%) had never attended School.

The results also revealed that 21 (42%) of the respondents were in formal employment followed by 20 (40%) who were subsistent farmers. This could be due to the fact that some individuals are employed by the mission as well as by the institutions around. Their high education level could also be the reason for their being employed.

### **5.3 DISCUSSION OF VARIABLES**

#### **5.3.1 Knowledge on HIV/AIDS**

The findings showed that all the respondents had heard about HIV/AIDS. The majority of the respondents (84%) obtained information about HIV/AIDS from the health workers. This implies that the health workers are active in giving health education and sensitizing the community about HIV/AIDS. It can also be deduced that people interact with the health workers when seeking health care. It

is likely that information is provided then. However, 72% of the respondents had obtained information from radio/TV signifying that people listen to the radio. The 54% of the respondents obtained information on HIV/AIDS from enlightened relatives and friends. This is a true picture of Zambian society that information is shared in the communities especially among peer groups. Similar findings for FGDs showed that all respondents acknowledged hearing about HIV/AIDS either from the health workers, listening from the radio or from relatives or friends. When asked to define HIV/AIDS, the majority of the respondents 58% defined HIV/AIDS as having a virus that causes AIDS and 42% of the respondents defined it as a deadly or killer disease. Some of the participants of FGDs also stated that it is a virus that causes AIDS.

The majority of the respondents 84% perceived HIV/AIDS to be very common in Zambia while 16% perceived it to be fairly common. This implies that many people have seen someone suffering from HIV/AIDS. The findings further showed that the majority of the respondents 98% cited sexual intercourse, 90% pregnant mother to child and 80% through breast-feeding as modes of transmission for HIV. The majority of the participants in the FGDs were able to mention the above modes of transmission. Some indicated unscreened blood and sharing of needles and razor blades. This implies that majority of people know the correct modes of transmission of HIV. These findings support Jackson H (2000) that "the main transmission modes in Sub-Saharan Africa are unprotected sexual intercourse, unscreened blood transfusion and use of unsterile or shared needles and cutting instruments". In spite of health workers giving correct information on HIV/AIDS, there are still some individuals who do not understand HIV transmission. 4% of the respondents stated HIV is transmitted through sharing same cups, plates and toilets. The majority of the respondents 98% agreed that HIV cannot be treated and only 2% said that it could be treated. This suggests that many people are knowledgeable about HIV/AIDS.

### **5.3.2 KNOWLEDGE ON HIV/AIDS VCT**

The findings on HIV/AIDS and VCT showed that all the respondents 100% had heard of VCT and that the majority 96% obtained information on VCT from health workers while 54% obtained information from Radio and TV. In the FGDs all respondents acknowledged having heard about VCT. The majority of the participants also mentioned health workers as their source of information, others included relatives and friends and a few had Anti AIDS Drama group as their sources of information on HIV/AIDS. From these findings, it can be concluded that health workers are actively involved in giving IEC to people. This implies that the majority of respondents had adequate knowledge to help make a choice of having an HIV test or not. It also implies that HIV/AIDS information could be transmitted through peer groups and families other than through the health worker. Some participants in FGDs mentioned books and pamphlets as their source of information. This shows that a considerable number of people (52%) are literate.

When asked about the reaction of family members and friends to their HIV infected patients, 64% of the respondents stated that they were supportive. This shows that in Zambian society people support each other and that family ties are strong and that people have positive attitudes towards HIV patients by supporting them. Looking after the sick family members is considered as their responsibility as well as being an "honor and a privilege" (UNAIDS 1996). It can also be seen that HBC programme is assisting the sick members in their homes. However, 16% of the respondents stated that these patients are neglected. From these findings one can postulate that there is still HIV/AIDS stigma, which has greatly affected people's attitude in rendering care to HIV patients. Dr Ktskhe (1996) also said "lack of support for HIV/AIDS patients is largely blamed on the stigma the disease possess, people with AIDS are discriminated against". In response to how much they know about VCT, the majority of respondents, 64% were knowledgeable and 36% had little knowledge about VCT. The findings are agreement with CSO (2002) that "HIV/AIDS is very well known".

The majority of the respondents, 80% were willing to be tested for HIV, of which 60% stated the reason to have an HIV test was to know their health status while 12% stated that because they need to be put on treatment and 8% stated that they have to plan for the future. Findings were similar to the study done by Mwale Z, (2002). From these findings, it can be seen that people understand the importance of VCT through IEC.

The study also revealed that 20% of the respondents were unwilling to be tested for HIV, of which 10% stated fear of dying early as the reason for not wanting to have an HIV test while 6% stated that staff were not observing confidentiality. These findings support earlier findings by WHO 2002 in Kenya that "youths would go for VCT if results are kept confidential". It can also be deduced from the findings that despite all information obtained about HIV/AIDS and VCT, people still have fear to know their HIV status. It also showed that health workers do not uphold the code of confidentiality.

When asked who they would like to know about the results if positive. The majority, 52% stated that they would tell spouses, 18% would tell their friends and 12% of the respondents said they would tell no body. From these findings, it can be assumed that there's trust among spouses for they were able to tell each other of HIV positive results. It can be concluded that friendships are important in life. Long-term friends share life experiences as the saying goes "friendships are more important than relatives". However, there is still fear and stigma attached to HIV/AIDS as 12% of the respondents stated that they would tell nobody about their HIV positive results.

When asked about reasons for telling somebody about the HIV positive result, the majority, 34% of the respondents stated that so that those people who will be taking care of them when they become sick should know. 24% of the respondents stated that they can tell somebody their HIV positive result for



support both physically, spiritually and financially, 10% stated that it is a way of reducing stigma and discrimination and another 10% stated so that they live positively. Jackson H (2002) acknowledges, "VCT services help to reduce stigma, fear and anxiety around HIV/AIDS and increases openness in the community".

In response to reasons attributed for people's unwillingness to be tested for HIV. 50% of the respondents stated fear of dying early, 18% stated stigma and discrimination, and 14% stated lack of knowledge with another 14% who also stated staff did not observe confidentiality and 4% stated fear to be divorced. This is affirmative with Baggaley et al (1998) report that "reactions among clients at Kara Counseling and Training Trust, Lusaka where many people said they did not want to be tested because of a combination of hopelessness, stigma, discrimination and denial".

The study results revealed that the majority, 96% of the females had adequate knowledge about HIV/AIDS. This could be attributed to the fact that most females frequent health facilities as carers such that they are exposed to information on HIV/AIDS. In this study, 90% of the respondents who had adequate knowledge about HIV/AIDS were aged between 21-35 years and 100% were those who aged between 36-49 years. This could also be attributed to the fact that this age groups frequent health facilities where they become exposed to information and that the older one becomes the more experienced or knowledgeable one becomes. The majority of the respondents, 97% who had adequate knowledge about HIV/AIDS were married and 100% were divorced. These findings show a direct association between knowledge on HIV/AIDS and the marital status which also has an influence on willingness to have an HIV test.. This implies that married people with adequate knowledge on HIV/AIDS are willing to be tested for HIV as with Sweat et al 2000, who found that VCT services encourage couples to come together for counseling and testing.

In this study, majorities of the respondents 64% were Catholics, and out of this 94% had adequate knowledge where as 10% of the respondents were SDAs and out of this 100% had adequate knowledge. There were no direct association between religious denomination and the knowledge about HIV/AIDS. The findings also revealed that all 100% of respondents who attained grade 10-12, college and university educational levels had adequate knowledge about HIV/AIDS (Table 29). 50% of respondents who had never been to school and 33% of those who attained grade 1-7 had inadequate knowledge. This implies that respondent's information assimilation may be minimal due to low educational level as compared with those with high educational level. Education level as noted by CSO (2001-2002) can be a key determinant of the life style and status of an individual. The study found a positive relationship between education level and knowledge about HIV/AIDS as stated in the hypothesis. The higher the educational level the more likely one is to be knowledgeable on HIV/AIDS. The findings in this study showed that the majority, 95% of the respondents in formal employment had adequate knowledge on HIV/AIDS. The employment status of a person reflects the educational level and in addition the socio-economic status and the likelihood of being knowledgeable about HIV/AIDS. These showed a strong association between socio-economic indicator of education and employment and knowledge about HIV/AIDS. It is therefore, clear that those with high educational level and informal employment are more knowledgeable about HIV/AIDS. They are exposed to information on HIV/AIDS through exposure to other people and access to electronic and print media.

In this study, the majority of male respondents 84% were willing to have an HIV test while 24% of females were not willing to be tested. This could be due to that males have courage to withstand the results of the test where as married females may have no courage and may need a consent from the husband whose decision is important in the Zambian culture. The study also found that 80% of the respondent in the age group 21-35 years were willing to under go an HIV test, while those in age between 16-20 years 33% were not willing to be tested.

This could be attributed to the fact that HIV/AIDS is commonly associated with married people and most respondents in the teenager age group (16-20 years) could not have been married, while those in age group (21-35 year) are mostly married. The findings also show that the majority, 84% of married respondents were willing to have an HIV test. These findings show that the marital status has an influence on respondent's willingness to have an HIV test. The study also found that majority of grade 8-9 (88%), and grades 10-12 (100%) of respondents were willing to have an HIV test while the majority (67%) grade 1-7 were not willing. These findings show a positive association between educational level and willingness to be tested for HIV.

Although the majority of respondents had attained college/university level and were knowledgeable about HIV/AIDS, 13% were not willing to be tested for HIV. This could be attributed to the stigma that is attached to the disease. The hypothesis "the knowledge and utilization of VCT services are related to the educational level" is therefore not accepted. The study revealed a gap between willingness to be tested and knowledge level among college level respondents. This could be because these people are aware of their HIV status and that they fear to face the reality.

The study results show that majority of the respondents (86%) who were in formal employment were willing to have an HIV test. Formal employment is often associated with the educational level and the knowledge on HIV/AIDS. These findings support the hypothesis statement that states that individuals of high socio-economic status are more likely to be knowledgeable about HIV/AIDS than people of low socio-economic status. The study results also show that the majority of respondents (93%) who were willing to have an HIV test had adequate knowledge on HIV/AIDS. It can be deduced that when an individual is knowledgeable about HIV/AIDS he is more likely to be willing to have an HIV test than a person who has inadequate knowledge.

### 5.3.3 SERVICE RELATED FACTORS

In relation to service related factors, findings showed that all (100%) of respondents acknowledged having had a VCT centre in their communities. This could be due to the fact that VCT mobile sites have been set up for people to access the services. The study results showed that the majority (74%) of the respondents took less than ½ hour to get to the VCT centre while (24%) took between ½ -1 hour and only (2%) took 1 - 2 hours. This suggests that majority of the people stay within walk able distances to access VCT services. This is in agreement with the National Health vision "to provide all Zambian with equity of access to cost effective quality health care as close to the family as possible" (CBoH, 2002). The study results also showed that the majority of the respondents (54%) stated non-availability of ARVs at the VCT centre. This suggests that most people are not aware of the availability of ARVs. Availability of ARVs can contribute to utilization of VCT services. The study further revealed that majority (64%) of the respondents acknowledged to have received good reception from staff members at the VCT centre, 12% received very good reception while 14% received poor reception. This means that the staff attitude at the VCT centre was generally good. This agrees with the Christian principle "service of love to all people" which is instilled in staff at the mission hospital.

The study also showed that the majority (70%) of the respondents waited ½ – 1 hour before being attended to at the VCT centre while only (4%) waited for 2-3 hours. It can be seen that generally, people at the VCT centre are being attended to within the shortest period. Short waiting hours can encourage people to seek VCT services while long waiting hours can discourage them because they have other duties they have to attend to also. Waiting time therefore, may play a role in utilization to VCT services. It could also mean that there's adequate staffing at the VCT centre. The study result also showed that the majority (52%) of the respondents stated that staff attitude towards HIV patients was good while only 2% stated that it was negative. This implies that generally staff have a "heart" for HIV patients.

Finally, the respondents were asked to give suggestions on the low utilization of VCT services. In this study, most respondents (36%) commended that services are satisfactory and that they should be continued. This implies that health workers are providing good services. However, (16%) of the respondents suggested improvement on staff confidentiality, 14% suggested a change in negative attitudes by staff, 10% were for intensifying sensitization and IEC on VCT and ARVs, 6% to train youths as counselors as well as, 8% who stated the need to increase the number of counselors. 4% went on to state that available counselors should be motivated, another 4% stated there was need to increase VCT mobile sites and lastly 2% that doctors, tutors and HIV patients should be trained as counselors. HIV positive counselor would encourage utilization of VCT services as she/he may lead by example.

Some participants of the FGDs stated that money that is utilized on HIV/AIDS seminars given, as allowances to workers should be directed to HIV/AIDS patients who are the intended beneficiaries. These suggestions made by study participants are some of the factors that influence the utilization of VCT services that need to be addressed in order to make VCT acceptance a reality.

From these findings, the objectives stated in the study have been met, the knowledge levels of respondents were determined and found to be adequate and that Chilonga residents are aware of available VCT sites. The factors established that influence utilization of VCT services are fear and stigma. The findings also support the hypothesis that "the adequate knowledge level one has, the more likely one is able to utilize the services".

#### **5.4 Implications to the Health Care System**

The study results showed that most respondents had adequate knowledge (92%) about HIV/AIDS. Knowledge of HIV/AIDS may lead to more people volunteering to test for their HIV status. Having a test provides better knowledge of health

status relevant to personal health care and HIV transmission prevention. This would benefit the community and the government to reduce health care costs. It was evident too from the study that some individuals (20%) were not willing to be tested for HIV. These individuals could perpetuate the spread of HIV leading to increase in HIV cases. This in turn will cause more strain on the inadequate health resources due to disease burden. Therefore, there is need to intensify IEC on benefits of VCT services so that people can test for their HIV status.

Health workers were the main source of information on HIV/AIDS as well as the radio and TV. However, IEC on VCT has not made much impact in changing people's reactions on HIV/AIDS patients and willingness to be tested. There is need to equip health care providers with adequate knowledge and counseling skills to enable them communicate effectively with clients. There is also need to exploit other sources for the dissemination of HIV/AIDS VCT and ARVs information such as peer groups, schools and religious denominations in view of their teaching to create more awareness of VCT services available for them.

#### **5.4.1 Nursing Practice**

The reception given to clients at the VCT centre and the attitude of staff towards HIV/AIDS patients need to be positive so as to encourage people to utilize the services. This implies that nurses need to be trained in psycho-social counseling. There is also need to change nurses' negative attitudes towards HIV/AIDS clients by providing them with refresher courses and incentives to promote quality service provision.

#### **5.4.2 Nursing Research**

VCT is important in the prevention of HIV/AIDS. However, nursing practice cannot be improved without evidence-based knowledge. A research can be done to find out the effectiveness of VCT services. There is also a need to research on coping mechanisms of patients on ARVs.

### **5.4.3 Nursing Administration**

In this study, the respondents suggested that there is need to train more counselors, as well as HIV patients, doctors, tutors and youths as counselors. This therefore, calls for adequate staffing of qualified counselors who should be motivated to carry out their duties religiously.

### **5.4.4 Nursing Education**

Even though the nurse counselors had gone through the counseling course and nursing programme and attained knowledge on counseling and HIV/AIDS, some poor reception of clients and negative attitudes towards HIV/AIDS patients were shown. Positive attitude and counseling skills are necessary. This can be achieved through education. Frequent refresher courses should be provided so that they are kept abreast with new information.

## **CHAPTER 6**

### **6.0. CONCLUSION**

The Study was to determine factors influencing the low utilization of VCT services among adults in Chilonga who attended general OPD during the time of data collection.

Data was collected using a structured interview schedule and Focus Group Discussion. The sample consisted of seventy (70), fifty (50) for interview guide and twenty (20) for Focus Group Discussion. The study revealed that the majority of people had adequate knowledge about HIV/AIDS and VCT. The majority of the respondents eighty (80%) were willing to test for HIV. However, despite knowledge on HIV/AIDS Voluntary Counseling and Testing, twenty (20%) of the respondents were not willing to have an HIV test. The unwillingness to test for HIV contributes to the increase in the spread of HIV. This called for quality counseling and intensive information education and communication on the benefits of Voluntary Counseling and Testing.

### **6.1 RECOMMENDATIONS**

On the basis of the findings of this study, the following recommendations have been made:

#### **6.1.1 TO THE COMMUNITY**

- The community should talk openly about HIV/AIDS so that the stigma attached to the disease can disappear and more people can test for HIV.
- There is need for the community to encourage others to go for VCT and those living positively with HIV/AIDS need to come up in the open to motivate those who are unwilling.



- The community should not stigmatize or discriminate members living with HIV/AIDS but to support them.
- Couple counseling must be encouraged.

#### **6.1.2 TO VCT CENTRE STAFF**

- The VCT center staff needs to be holding counsellors' support meeting in order to share counseling experiences.
- There is need to review IEC strategies and programmes in the provision of counseling services.
- To improve the acceptance rate of VCT.
- Health staff and those who work in AIDS service should take the test for HIV and set an example.

#### **6.1.3 TO MINISTRY OF HEALTH**

- There is need for research to be conducted on factors dertermining low utilization of VCT on a larger scale.
- Train more counsellors including youths, doctors, tutors, and HIV patients who can make a difference.
- Intensify IEC on benefits of VCT on the media.
- Deliberate policy to be developed such as mandatory VCT for individuals wishing to marry.
- To work in closer collaboration with other stakeholders such as NGOs, Church Health Association of Zambia (CHAZ) institutions in creating VCT awareness.

### **6.2DISSEMINATION OF FINDINGS**

Four copies will be made and given to the Department of Post Basic Nursing, the Medical Library, the Ministry of Health and the researcher's self copy. Two executive summaries will be prepared and given to Mpika District Health office and Chilonga Hospital. Findings will be discussed with the hospital staff during a clinical meeting as well as the community where I carried out the study.

The findings will be published in the Nursing Journal and on the Internet.

### **6.3 LIMITATIONS OF THE STUDY**

- Limited Time: Time allocation was not adequate especially for data analysis as the study was done alongside with other courses during the academic year.
- Funding of this study had been inadequate making it impossible to purchase the necessary requirements to carry out the study, contributing also to the reduction in the sample size. The sample size thus was too small to make statistical generalization to the whole population.
- One health facility was used to collect data such that results can not be generalized.
- Lack of scientific research findings on low utilization of VCT made it difficult to have some of the findings supported.

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## **APPENDIX 1: QUESTIONNAIRE**

**UNIVERSITY OF ZAMBIA**

**SCHOOL OF MEDICINE**

**DEPARTMENT OF POST BASIC NURSING**

**STUDY TITLE:** FACTORS DETERMINING LOW UTILIZATION OF  
VOLUNTARY HIV COUNSELING AND TESTING SERVICES AT CHILONGA  
HOSPITAL

**INTERVIEW SCHEDULE FOR ADULT RESPONDENTS ATTENDING  
HEALTH SERVICES AT CHILONGA OPD.**

**QUESTIONNAIRE NO.....**

**DATE OF INTERVIEW:.....**

**PLACE OF INTERVIEW:.....**

### **INSTRUCTIONS TO THE INTERVIEWER**

1. Introduce yourself to the respondent
2. Explain the purpose of the interview and reasons for undertaking the research and ask for permission to interview the participant as well as taking notes.
3. Participants should not be forced to be interviewed
4. Assure confidentiality and all information should be kept confidential.
5. Do not write respondents names on the interview schedule.
6. Write/tick responses in the spaces provided.
7. Thank the respondent at the end of each interview and assume how best the data will be used

SECTION A

FOR OFFICIAL USE

DEMOGRAPHIC DATA

- 1. Sex
  - a. Male ( )
  - b. Female ( )
  
- 2. Age on last birthday
  - a. 16-20 years ( )
  - b. 21-35 years ( )
  - c. 36-49 years ( )
  - d. above 50 years ( )
  
- 3. What is your marital status?
  - a. Single ( )
  - b. Married ( )
  - c. Widowed ( )
  - d. Divorced ( )
  
- 4. What is your denomination .....
  
- 5. How far did you go in your education?
  - a. None ( )
  - b. Grade 1-7 ( )
  - c. Grade 8-9 ( )
  - d. Grade 10-12 ( )
  - e. College ( )
  - f. University ( )
  
- 6. What is your source of livelihood?  
.....

☐☐☐☐☐

## SECTION B

### KNOWLEDGE OF HIV/AIDS

7. Have you ever heard of HIV/AIDS

a. Yes ( )

b. No ( )

☐

8. If your answer is yes to question 7, where did you hear it from?

hear it

a. Radio, TV ( )

b. Books/Pamphlets ( )

c. Relatives/Friends ( )

d. Health worker ( )

e. Others, Specify.....

☐

9. What is HIV/AIDS?.....

☐

10. According to your understanding do (HIV/AIDS) exist in Zambia?

a. It does not exist ( )

b. Not common ( )

c. Fairly common ( )

d. Very common ( )

☐

11. How can you get HIV? (Please tick all the correct Answers)

a. Sexual intercourse ( )

b. Breathing infected air ( )

c. Pregnant mother to unborn child ( )

d. Using same cups, plates, toilet ( )

e. Breast feeding ( )

☐

f. Other specify.....

12. Have you had a relative or friend infected with

HIV?

a. Yes ( )

☐

b. No ( )

13. If your answer is yes to question no 12; what was the reaction of his/her family members and friends?

a. Neglected the patient ( )

☐

b. Supportive ( )

c. Very supportive ( )

14. Can HIV be treated?

a. Yes ( )

☐

b. No ( )

## SECTION C

### OPINION ON HIV/AIDS VCT

15. Have you ever heard of voluntary HIV counseling and testing

a. Yes ( )

☐

b. No ( )

16. If the answer is yes to question no. 14, how did You get the information on voluntary counseling and testing?

a. Radio/TV ( )

☐

b. Books/Pamphlets ( )

c. Health workers ( )

d. Relatives/friends ( )

e. Others, specify .....



17. How much do you know about VCT?
- a. Knowledgeable ( )
  - b. Little knowledge ( ) ☐
  - c. First heard the term ( )
  - d. Not knowledgeable ( )
18. Would you like to have an HIV test done on you?
- a. Yes ( ) ☐
  - b. No ( )
19. If your answer to question 17 is yes, state the reason to have the HIV test?
- .....
- .....
20. If your answer is No, to question 17 what are the reasons for not wanting to have the test done
- .....
- .....
21. If your results are positive who would you like to know about the results?
- a. Spouse ( )
  - b. Father ( ) ☐
  - c. Mother ( )
  - d. Brother/Sister ( )
  - e. Friend ( )
  - f. Nobody ( )
22. Give reasons for your answer

.....  
.....

☐

23. What reasons can you attribute for people's?

Unwillingness to be tested for HIV

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

☐

## SECTION D

### SERVICE RELATED FACTORS

24. Do you have a VCT centre in your community?

a. Yes ( )

b. No ( )

☐

25. If Yes, how long does it take you to get to the  
VCT Centre?

a. Less than 30 minutes ( )

b. 1/2 - 1 hour ( )

c. 1 - 2 hours ( )

d. 2 - 3 hours ( )

☐

26. Are the Antiretroviral drugs available at your  
VCT Centre?

a. Always ( )

b. Sometimes ( )

c. Never ( )

☐

27. How is the reception of the staff members at the

VCT centre?

- a. Poor ( )
- b. Fair ( )
- c. Good ( )
- d. Very good ( )

☐

28. How much time do you spend at the VCT Centre before being attended to?

- a. 1/2 - 1 hours ( )
- b. 1 - 2 hours ( )
- c. 2 - 3 hours ( )

☐

29. What is the attitude of health workers at your Local health centre towards HIV/AIDS patients?

- a. Bad ( )
- b. Fair ( )
- c. Good ( )
- d. Very good ( )

☐

30. What recommendations can you give to the relevant authorities on the low utilization of VCT services.....

☐

.....  
.....

Thank you very much for your time and cooperation.

## **APPENDIX 2: FOCUS GROUP DISCUSSION**

1. Have you ever heard of voluntary HIV counseling and testing? What is your understanding of VCT?
2. Do people use voluntary counseling and testing services in your communities? Explain
3. What are your views about voluntary HIV counseling and testing?
4. What are the benefits of voluntary counseling and testing?
5. Where do you go for voluntary HIV counseling and testing services?
6. Do people have confidence in the VCT staff?
7. Do you think the services that are offered are adequate?
8. What are some of the traditional beliefs regarding voluntary HIV counseling and testing?
9. What are some of the religious beliefs regarding voluntary HIV counseling and testing?
10. Why do you think people are unwilling to be tested for HIV?
11. What suggestions can you give to encourage people to accept voluntary counseling services?
12. What recommendations can you make to the relevant authorities?

### APPENDIX 3: LETTER OF AUTHORITY



**THE UNIVERSITY OF ZAMBIA**

**SCHOOL OF MEDICINE**

Telephone: 252641 Department of Post Basic Nursing

Telegrams: UNZA, LUSAKA

P.O Box 50110

Telex: UNZALU ZA 44370

Lusaka, Zambia

Fax: + 260-1-250753

=====

25<sup>th</sup> July 2005

The Executive Director General

Chilonga Mission Hospital

P O Box 450030

MPIKA

UFS: The Head of Department

Department of Post Basic Nursing

School of Medicine

P O Box 50110

LUSAKA

Dear Madam,

**RE: PERMISSION TO CONDUCT A RESEARCH STUDY**

I am a fourth (4) year student pursuing a degree programme in Nursing. As part of the course requirements I have to undertake the research study. It is in this premise that I write to seek for permission to undertake the study in Chilonga. The title of the study is "determining the factors contributing to low utilization of voluntary HIV counseling and testing among adults who attend health services at Chilonga Hospital. I intend to do my study in the month of September 2005.

It is my prayer that the research findings will be useful for improving the utilization of VCT services countrywide.

Your assistance and cooperation towards this request will be highly appreciated.  
Thanking you in anticipation.

Yours faithfully,

*Sr R Kabonga*  
**Sr. Rosemary Kabonga, Student PBN**

#### **APPENDIX 4: AUTHORITY TO UNDERTAKE STUDY**

Sr. Rosemary Kabonga  
Chilonga Hospital  
PO BOX 450030  
MPIKA.

Dear Sr Kabonga,

#### **RE: PERMISSION TO CONDUCT A RESEARCH STUDY**

I am glad to inform you that permission to undertake the study is granted and you can start as soon as you are ready.

Wishing you the best in your studies.

Yours truly,

Dr Pauline Basboom,  
Executive Director.

## APPENDIX 5: WORK PLAN

<b>TASK TO BE PERFORMED</b>	<b>DATES</b>	<b>PERSONNEL ASSIGNED TO TASK</b>	<b>PERSON DAYS REQUIRED</b>
Literature Review	Continuous	Investigator	Continuous
Formulation of Research Proposal	1 <sup>st</sup> May - 30 <sup>th</sup> July	Investigator and Research Supervisor	90 days 2x90 days
Clearance from National and funding authorities	8 <sup>th</sup> -15 <sup>th</sup> August	Ethical Committee Post Basic Nursing Supervisor	7 days 1x7 days
Printing proposal	4 <sup>th</sup> - 14 <sup>th</sup> August	Investigator/secretary	2x14 days
Pilot Study	22 - 23 <sup>rd</sup> August	Investigator	1x2 days
Data Collection	1 <sup>st</sup> September-7 <sup>th</sup> October	Investigator/Research Assistant	2x35 days
Data Analysis	17 <sup>th</sup> October - 30 <sup>th</sup> November	Investigator/Supervisor	2x45 days
Report writing	1 <sup>st</sup> - 30 <sup>th</sup> December 2005.	Investigator and Supervisor	2x28 days
Draft Report to PBN	21 <sup>st</sup> - 31st January, 2006	Investigator	1x7 days
Submission of Report	1 <sup>st</sup> -6 <sup>th</sup> February, 2006	Investigator	1x6 days
Feedback to relevant authorities	6 <sup>th</sup> - 24 <sup>th</sup> February, 2006	Investigator and research supervisor	1x18 days
Monitoring Research project	Continuous	Investigator and Research Supervisor	Continuous

## APPENDIX 6: BUGDET AND JUSTIFICATION

DESCRIPTION OF TERMS	UNIT COST IN KWACHA (K)	QUANTITY REQUIRED	TOTAL VALUE (K)
<b>1. STATIONERY</b>			
Paper (Ream)	25,000.00	3	75,000.00
Pens (Packet)	16,000.00	1	16,000.00
Pencils (Packet)	3,000.00	1	3,000.00
Rubbers	500.00	2	1,000.00
Folders	20,000.00	2	40,000.00
Tippex	10,000.00	2	20,000.00
Ruler	1,500.00	2	3,000.00
Diskettes	3,000.00	10	30,000.00
Flip Chart	60,000.00	1	60,000.00
Markers	5,000.00	3	15,000.00
Perforator	20,000.00	1	20,000.00
Stapler (Heavy duty)	50,000.00	1	50,000.00
Staples	20,000.00	1	20,000.00
Spiral binders	2,000.00	7	14,000.00
Box files	5,000.00	2	10,000.00
Scientific Calculator	100,000.00	1	100,000.00
Blank audio tapes	35,000.00	1 packet	35,000.00
<b>Sub Total:</b>			<b>503,000.00</b>
<b>2. PERSONNEL</b>			
Lunch allowance	50,000.00	14 x 2	1,400,000.00
Transport money	100,000.00	2	200,000.00
Research bags	15,000.00	2	30,000.00
<b>Sub Total:</b>			<b>1,600,030.00</b>
<b>3. SECRETARIAL SERVICES</b>			
Computer (Lap top)	6,000,000.00	1	6,000,000.00
Printer	500,000.00	1	500,000.00
Toner	150,000.00	1	150,000.00
Typing proposal	100,000.00	1	100,000.00
Photocopying proposal	200.00	60	12,000.00
Binding	10,000.00	2	20,000.00
Typing Questionnaire	2,000.00	5	10,000.00
Photocopying Questionnaire	200.00	5	1,000.00
Typing Report	2,000.00	50	100,000.00
Binding	10,000.00	5	50,000.00
<b>Sub Total:</b>			<b>6,943,000.00</b>
<b>Sub grand total</b>			<b>9,046,030.00</b>
<b>Contingency 10%</b>			<b>904,603.30</b>
<b>GRAND TOTAL</b>			<b>K9,950,633.30</b>



## **JUSTIFICATION OF THE BUDGET**

In order to carry out the study effectively and professionally, funds for operational, administrative and secretarial services were needed as stated below:

### **STATIONERY**

Stationery was needed to carry out the study. This included: typing bond paper for printing questionnaire and research proposal, pens and paper for writing, rubber for erasing mistakes, flip chart for data analysis, markers were used on the flip chart, file for filing documents to keep information, research bag for carrying questionnaires during data collection, ruler for drawing lines, heavy duty stapler - big for stapling documents and computer with its accessories for typing work and analyzing data. The computer was not purchased due to limited funds.

### **SECRETARIAL SERVICES**

Funds were needed for work to be typed and printing of the research proposal, questionnaire and the research report. There was also need to make photocopies of the research proposal, questionnaires and the research report.

### **PERSONNEL**

The researcher needed money for transport to travel to and from the research site. Lunch allowance was needed during data collection for both the researcher and the research assistant. Blank audiotapes were also required for tape recording during focus group discussion sessions.

### **CONTINGENCY**

10% of the total amount for the budget was added to the total amount of the budget for the inflation as well as unforeseen expenses during the study. Even then, it was not adequate to cater for the expenses.

