AN ASSESSMENT OF IEC GIVEN TO HIV AND AIDS PATIENTS IN MEDICAL CLINIC AT UTH

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A RESEARCH STUDY SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF BACHELOR OF SCIENCE IN NURSING DEGREE AT THE UNIVERSITY OF ZAMBIA
SCHOOL OF MEDICINE

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To all, I say may the good Lord richly bless you.
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<td>ART</td>
<td>Antiretroviral therapy</td>
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<td>ARVs</td>
<td>Antiretroviral drugs</td>
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<td>CCA</td>
<td>Christian Council Act</td>
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<tr>
<td>CIDRZ</td>
<td>Centre for Disease Research in Zambia</td>
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<tr>
<td>CSO</td>
<td>Central Statistical Office</td>
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<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
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<td>GNC</td>
<td>General Nursing Council</td>
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<td>HAART</td>
<td>Highly Active Antiretroviral Therapy</td>
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<td>HEAL</td>
<td>Health, Education, and AIDS Liaison</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NMCHC</td>
<td>National Maternal and Child Health Centre</td>
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<tr>
<td>PHC</td>
<td>Primary Health Care</td>
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<tr>
<td>PLWHA</td>
<td>People living with HIV/AIDS</td>
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<td>PMTCT</td>
<td>Prevention of mother to child transmission</td>
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<td>STIs</td>
<td>Sexually Transmitted Infections</td>
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<td>SWAP</td>
<td>Sector Wide Approach</td>
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<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<td>USA</td>
<td>United States of America</td>
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<tr>
<td>UTH</td>
<td>University Teaching Hospital</td>
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<td>VCT</td>
<td>Voluntary counselling and testing</td>
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<td>WHO</td>
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DECLARATION

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

Signed: [Signature] Date: 14/04/08

(Candidate)

Approved by: [Signature] Date: 14/04/08

(Supervisor)
STATEMENT

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

Signed: [Signature] Date: 14/10/08

(Candidate)
DEDICATION

This research is dedicated to my two daughters Nyambe R. and Mutame T., my mother Mrs. M. Hamwiibu, my brothers Rive, Shadreck and Royford who have always wanted to see me succeed in life and from this encouragement, I have always worked hard.

I would also like to dedicate this research to my late father, Mr. E. Hamwiibu, who without his encouragement and support, I would have not reached this far.
ABSTRACT

The purpose of this research was to assess the Information, Education and Communication (IEC) given to HIV/AIDS patients in University Teaching Hospital (UTH) and was carried out to determine whether patients are given IEC during their subsequent visits to the hospital.

The objectives of the study were to assess the content of IEC given to HIV and AIDS patients during the pre-testing counselling session and subsequent visits, determine the frequency at which HIV and AIDS patients received IEC and to determine factors influencing adherence to IEC.

A descriptive study was conducted in September, 2007. The study was done on patients attending reviews in the Medical Clinic, particularly, those who are HIV positive.

A total number of 50 HIV/AIDS patients were selected using simple random sampling method, while the study site was selected using purposive sampling technique.

Data was collected by use of a structured interview schedule from 23rd September to 3rd October, 2007.

When interviewed on what patients were taught on HIV and AIDS and how frequently did they receive IEC on HIV issues during the subsequent reviews, 54% had inadequate IEC and 58% had received IEC only once on the initial visit to the clinic.

In order to help HIV and AIDS patients receive adequate IEC at every visit to the clinic, some of the recommendations that were made to the concerned parties are:

- In order for HIV information to be comprehended and adhered to by all HIV and AIDS patients in the clinic, the management should ensure that
health care providers assigned to run the Highly Active Antiretroviral Therapy (HAART) Clinic are trained and acquire the competences for handling these patients.

- The Ministry of Health should employ more health workers and deploy and assign a good number to UTH to improve on the human resource. This will allow health care providers find adequate time to teach patients and ensure that the taught information is followed. This move can also improve patient-healthcare relationship.

- Since there are few staff to run the clinic and some patients some difficulties to obtain permission from their places of work, it would work well if the weekend or Saturday Clinic is introduced. This will accord those clients who are working ample time to learn more information on HIV as compared to patients hurrying up to go back for work. Those patients who have not disclosed their status to employers should be encouraged to do.
CHAPTER 1
1.0 INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) has for the past two decades continued to spread across all continents killing millions of adults in their prime, disrupting and impoverishing families and turning millions of children into orphans (Ministry of Health (MOH), 2005).

Most HIV infections in Zambia are as a result of unprotected heterosexual activities which poses a challenge to the health sector (MOH, 2006). The government has responded to the challenge by identifying interventions to control the spread and mitigate the impact of HIV and AIDS. One of the interventions the government has identified is the provision of Information, Education and Communication (IEC) to HIV and AIDS patients through different Methods (MOH, 2002). The adopted methods to achieve these interventions include sensitization through television, radio, drama, role-plays, billboards, use of pamphlets and health talks provided by the health care workers (MOH, 2005).

1.1 Background

Zambia is a landlocked country in Sub-Saharan Africa. It shares international boundaries with eight (8) 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 in the south-west and Angola in the west (Central Statistical Office (CSO), 2004). Zambia covers an area of 752,612 square kilometers (about 2.5% of Africa), which is divided into nine (9) provinces and seventy-three districts. Of these provinces, Lusaka and Copperbelt are predominantly urban while Northern, Luapula, North-Western, Southern, Central and Eastern Provinces are rural. Zambia has an estimated population of about 11 million people and is one of the most urbanized countries in sub-Saharan Africa (CSO, 2004).
1.1.1 Health Care System in Zambia

Zambia has undergone different political systems, each with particular emphasis on health care delivery. Before independence, the population was sparsely distributed and was predominantly rural. There were no adequate health facilities. However, the colonial masters offered health care services and these were concentrated along the line of rail. Various church missionaries mainly served the rural communities.

After Zambia attained independence, medical care was provided free to all residents. However, when the economy declined in the 1970s and 1980s, the performance of health care sector declined. The infrastructure deteriorated and there were poor working conditions for government health workers. Emergence of HIV in the 1980s contributed to the increase in the disease burden. The impact of the HIV and AIDS epidemic has forced the government to come up with programmes aimed at controlling and preventing its spread. The most critical programme is the IEC given to HIV and AIDS patients with the focus on the need to change their behaviors and promote healthy living.

Information, Education and Communication is a health service rendered to people living with HIV and AIDS. The provision of IEC is one of the Primary Health Care (PHC) concept priorities on HIV and AIDS prevention. Among the channels the government has identified to provide IEC, the health care workers is the most critical as they are strategically place in the health care system (MOH, 2005).

In order to improve the IEC to HIV and AIDS patients, government has trained a number of health workers in HIV and AIDS management skills. So far, many training centres have been opened up and are being run by government. For instance, there is a counseling training centre at Chikankanta Mission Hospital and University Teaching Hospital (UTH) where the Psychosocial Counseling course is offered. On the other hand, the government has been conducting workshops in respective health facilities on the same subject.
To add on to government’s effort in raising HIV and AIDS knowledge and competence among the nurses in Zambia, the General Nursing Council of Zambia (GNC) revised curricula for Enrolled and Registered Nursing Programmes to incorporate issues of HIV and AIDS policy, ethical considerations, prevention of mother to child transmission (PMTCT), psychosocial counseling, and IEC (GNC, 2004). This, however, does not meet the needs of HIV positive patients and this can be attributed to various factors.

The HIV and AIDS patients require support from healthcare providers in order to hasten their realization to comply with or adhere to IEC given as envisioned by the Ministry of Health (MOH, 2005). Since nurses spend most of their time with patients, they are better placed to provide IEC in order to promote healthy living in HIV infected patients, but they are not enough to meet the ever growing number of patients diagnosed with HIV infection as elaborated above.

The hallmarks of IEC given to HIV and AIDS patients is to help those who are HIV negative stay negative, those who are HIV positive protect others and to refer those who are HIV positive for care and support. The topics covered when educating HIV positive patients include family planning, PMTCT, clinical care and psychosocial support, need for adherence to antiretroviral therapy (ART) for those who are on treatment, HIV disease prevention, risk reduction, need for disclosure, nutrition support, childbearing and healthy living (Health Resource Service Administration, 2001). The IEC is also aimed at raising HIV awareness, reduce stigma, influence behavior change, promote condom use and case finding, and treatment of Sexually Transmitted Infections (STIs) among the HIV infected individuals (Health Resource Service Administration, 2001). The patients are taught about these aspects of their care and concerns at initial visit, every visit and at intervals as needed (Health Resource Service Administration, 2001).

Currently in Zambia, most of the health facilities including UTH, which is the largest referral hospital, are offering services for HIV and AIDS patients. The hospital runs a medical clinic where Highly Active Antiretroviral Therapy (HAART)
services are provided to HIV and AIDS patients. Some health workers have been trained in the management of HIV and AIDS patients. Despite a good number of health workers who have been trained in psychosocial counseling skills, only 2 nurses and a varying number of physicians, between 2 to 3, are operating from the medical clinic in UTH, serving an estimated number of 2,554 HIV positive patients per month (Centre for Infectious Disease Research in Zambia (CIDRZ), 2007). This may result in little time which the health care provider can have to teach the HIV and AIDS patient, detailed facts about HIV transmission and prevention, thus compromising the IEC given.

Given the background, IEC forms the foundation of management to patients living with HIV. Therefore, there is need to undertake a study to assess the IEC given to these patients. This will help in identifying whether the content of IEC given to the patients is adequate or not and there by institute some interventions.

1.2. STATEMENT OF THE PROBLEM

Despite all the above measures of improving the delivery of IEC, new HIV infected patients are being reported; incidents of STIs continue to rise among HIV and AIDS patients. Further more, stigma and discrimination against HIV and AIDS patients is going on in the community, and development of virus strains to the ARVs is being reported among HIV and AIDS patients (informal reports from the medical clinic staff in UTH, 2007). Investment has been done in informing and educating patients about HIV infection prevention and it is mostly likely that they ‘know the facts’, but knowledge acquisition has not led to large-scale behavior change among these patients.

According to the statistics at the Medical clinic at UTH (2007), 2,554 HIV infected patients were enrolled for monitoring and care, only 2,532 turned up for review at the end of the month of June 2007, representing 1.2% of patients not followed up (CIDRZ, 2007). The 1.2% patient not followed up indicated that some patients miss out on subsequent visits to the hospital, resulting in the break in their learning process. No matter how small the number of patients not followed up
might be, they will still spread the disease to other people not infected as they will not comply with the IEC. Those patients on ARVs may not take the drugs at the right time, take the right dose and take the drugs missing some doses. If this happens, there will be more strains of resistance to the drugs that might be reported. Informal discussions with the staff in the Medical Clinic reports that there are a number of drug resistance strains being attended to in the clinic, which is a sad development. This result is in line with Blower et al (2001) who stated that the health sector today is facing a challenge of the unpredictable transmission of HIV which is being complicated with the development of drug strain HIV. This could be attributed to patients’ failure to ARVs correctly.

The vastness of this problem cannot be overemphasized as can be seen from the foregoing. This is so because information given to these patients can have an impact in ART, which is a lifetime therapy regime. On the other hand, due to the failure to follow the IEC, the likelihood of further spreading of the HIV infection and occurrence of STIs among the individuals in the community and nation at large may continue. Infection may continue to spread as patients may fail to practice the healthy living activities as stressed on during the counseling and education sessions.

Considering the content of IEC to be given to HIV and AIDS patients, it may either be inadequate or not given at all to the patients leading to clients not adhering to or complying with it. The purpose of this study, therefore, is to assess the IEC given to HIV infected patients in relation to promotion of health
1.3 FACTORS INFLUENCING IEC GIVEN TO HIV AND AIDS PATIENTS

There are various factors that may influence the IEC given to patients living with HIV and AIDS. These factors may be grouped into patient related factors and health related factors.

1.3.1 Patient Related Factors

1.3.1.1 Poor Patient-Health Provider Relationship

As the patients seek medical services, they tend to make close relationships with health care workers. These relationships help them to understand and internalize the information given. However, if this relationship is poor, the patient may not understand and comply with the IEC given.

1.3.1.2 Age of the Patient

By virtue of being a child, understanding of HIV and AIDS issues may not be adequate. Children are usually not told of their HIV status until reaching the certain age when they will be able to understand and comprehend issues. According to informal discussion with child counselors from Voluntary Counseling and Testing Center at Paediatric Wing, HIV status is disclosed to children when they attain the age of 14. Before reaching this age, children’s healthy living activities are usually carried out by a third party who is a caretaker, to interpret HIV issues for them.

According to Gerson et al (2003), the right age for disclosing HIV diagnosis to a child is when they reach 14 year and above. This agrees with the practice at the UTH’s Voluntary Counseling Center. At this age, the child is believed to have developed some sense of knowing what is happening. The child would also be able to take some responsible activities towards their health. Gerson et al (2003) stated that this is the right age to start preparing the child for their challenging life in future.
On the other hand, adolescents may not feel free to discuss sensitive issues about HIV with a health worker. The health worker may find difficulties in teaching a youth on HIV infection as youths are a special group of people who are easily influenced by the peers. This is because the health worker may want to teach the adolescent in details but the youth may not be willing to be taken through a long discussion because they are in a hurry to be with their friends, leading to inadequate IEC being given. At the same time, youths may be willing to more as they are trying to discover more. Meanwhile, the elderly may not understand HIV and AIDS related facts as the health care worker may try hard to give out the information. This is because elders may not be able to comprehend the terminologies used as some of them are not educated.

1.3.1.3 Gender of the Patient
Depending on patients' preference, some patients will feel uncomfortable to be taught on the issue dealing with HIV and AIDS. If the health worker which the patient prefers is not available, the health worker teaching this particular patient may not give detailed information as expected. The patient will be forced into the discussion session where he/she will not appreciate at all and may not be able to probe further to learn more on the condition. This is mostly likely going to compromise the IEC that the health workers will give. In such a situation, patients may not openly discuss health problems affecting them.

1.3.1.4 Patient's Education Level
Patients who have attained grade nine and above are considered to have obtained basic education. These patients may be assumed as those who can understand HIV issues better. If the patient is a child or elderly and has never been to school, understanding of HIV and AIDS issues and facts will be very difficulty. The health care provider may find problems in educating patients who have never been to school. This is because such patient may not understand English, which is the official language or the health worker may not be able to speak the language which the client understands well. The patient may also fail
to comprehend the HIV and AIDS facts given in the IEC as they are not able to articulate HIV and AIDS issues critically.

1.3.1.5 Increased number of patients seeking medical services
HIV has brought about an increased number of patients seeking health care services. This increase in patients seeking medical services may lead to the health care providers not having adequate time to explain issues to patients. This is because the health care provider may try to work tirelessly to accord each client opportunity to be attended to. This may result in the health worker not educating the HIV positive patient as required.

1.3.2 Health Care Service Related Factors

1.3.2.1 Shortage of Health Care Providers
Zambia's health system faces chronic and severe staff shortages. Attrition levels, due to AIDS, migration and other reasons are very high. The critical shortage of health care providers due to factors alluded to could lead to increased work load and this may contribute to inadequate time to share information with patients as they come for review. If the explanations of information on HIV by health providers to clients is not adequate as sometimes there are only 2 to 3 doctors to attend to so many patients who come for reviews, there is likelihood that the IEC given may not be detailed enough to assist the patient with the power of making an informed decision. This is because the health worker may not spend enough time, at least 30 minute, to teach every patient the HIV issues, but time is likely to be reduced to 5 to 10 minutes.

1.3.2.2 Attitude of Health Care Providers
The poor attitude of health care providers may have an impact on their responsibility to teach the patients, which could lead to inadequate information being provided to patients living with HIV who require courteous approach. The negative attitude may put off the patient as they will not accept the stranger, the health, to frustrate them, probably the health work lack skills in managing these
clients. Therefore, negative attitude of health workers may affect the IEC they are giving clients as they may not explain the information well.

1.3.2.3 Lack of Communication Skills
Communication is normally a two way process which enables transmission of the message from one person to another. Lack of communication skills by health provider may affect the communication process and eventually lead to delivery of inadequate IEC to clients. The patient with HIV infection, which is so sensitive, requires a health care provider with special communication skills to deliver IEC without injuring the patients’ feelings. If the patient’s feelings are injured, then the patient is not likely to appreciate the information they are going to receive.

1.3.2.4 Accessibility to health services
Patients are supposed to be referred back to the nearest health centre for follow up care. Due to lack of specialized laboratory follow up like the monthly checks up of the viral load, CD4 cell count, liver and kidney function tests in some clinics, patients are forced to come to UTH for follow up care on the specialized services, thus traveling and covering long distances more than 12 kilometers to reach health facility. This may contribute to the failure of the patient to seek medical services as advised, leading to the IEC which patients receive to be not constant.

1.3.2.5 Lack of Privacy
If at the hospital facility, the examination rooms do not provide adequate privacy as their demarcations may be curtains, privacy might not be guaranteed. This makes the conversations going on between the patient and the health care provider be heard by other patients. This may lead to health care providers to leave out some sensitive issues to be discussed as the patient is being taught about the HIV and AIDS facts.
1.4 FIGURE 1: DIAGRAM OF FACTORS THAT MAY INFLUENCE THE IEC GIVEN TO HIV AND AIDS PATIENTS IN MEDICAL CLINIC AT UNIVERSITY TEACHING HOSPITAL.

PATIENT RELATED FACTORS

- Increased number of patients seeking medical services
- Poor health worker-patient relationship
- Age of patient
- Gender of patient

IEC given to HIV and AIDS in UTH

HEALTH RELATED FACTORS

- Inadequate communication skills of Health providers
- Inadequate training of Health care providers
- Attitude of health
- Shortage of health workers
- Accessibility to health services
- Lack of Privacy
1.5 JUSTIFICATION

Provision of information, education and communication to patients is not a recent innovation. The programme has been emphasized on with the coming of HIV infection. This emphasis requires training of health care personnel in the provision of effective and efficient IEC to HIV positive patients.

The management of HIV and AIDS is still in its infancy, particularly in Zambia there is little documentation available on whether information given to patients throughout their care is complied with (MOH, 2005). This is because health care providers know what they are supposed to teach on HIV preventive measure to people living with HIV and AIDS, but due to various factors, the IEC taught is either adequate or not, leading to many other consequences. Some of the aims of IEC are to prevent further spread of HIV infection in the HIV negative people, mitigate the impact of HIV and AIDS in the community and promoting positive living among HIV and AIDS patients (MOH, 2005). It is for this reason that many developing countries have taken IEC as one of the priority strategies in care of HIV positive patients and prevention of infection from further spreading.

In Zambia, IEC service was emphasized on in 1980s. The IEC seems to have been used massively by the health sector in reducing the impact of HIV infection on persons who are infected. People have conducted different studies on HIV prevention and control, however, little documentation, from patients' point of view, has been done. It is difficult to determine whether messages of HIV infection prevention, management and control are received by the HIV and AIDS patients as desired to curb its impact. The researcher, therefore, has decided to embark on this study in order to assess the content of IEC being given to HIV and AIDS patients. The findings of this study will be useful in the continued programme for prevention and control in relation to the IEC activities through dissemination of the findings and recommendations to the relevant authorities.
1.6. RESEARCH OBJECTIVES

1.6.1 General objective
To assess the IEC given to patients living with HIV and AIDS at the Medical Clinic at UTH.

1.6.2 Specific Objectives
1. To assess the content of IEC given to HIV and AIDS patients
2. To determine the frequency at which patients receive IEC.
3. To determine factors influencing adherence to IEC
4. To identify areas for further research in relation to IEC for HIV and AIDS patients
5. To make recommendations to relevant authorities for implementation.

1.7 HYPOTHESES
1. The content of IEC given to HIV and AIDS patients affects the IEC HIV and AIDS patients receive.
2. Frequency of teaching the HIV issues and facts to HIV and AIDS patients affects the content of IEC received by the patients.
1.8 OPERATIONAL DEFINITION OF TERMS

- **Adherence**: This term is used to mean compliance with either IEC given or an ARV drug regime, thus, taking the drugs correctly (correct number of pills, taken at the right time, with consideration of food requirements and without missing doses).

- **Assessment**: An investigation is done to determine the information and education given to the clients, and how much communication is being given to HIV/AIDS patients.

- **Communication**: This is the exchange or sharing of HIV and AIDS information between the patient and the health worker.

- **Education**: The process of learning the HIV issues and facts.

- **HIV/AIDS**: This is an infection causing serious and many challenges to the health sector, killing millions of adults, disrupting and impoverishing families and turning millions of children into orphans.

- **Information**: The message or content of the communication process that involves teaching HIV and AIDS patients, preventive and control measures of HIV infection.

- **Information, education and communication**: Is the giving of new ideas and facts on HIV to people living with HIV and AIDS from which they can make informed decisions.

- **Medical Clinic**: This is a specialist clinic, in UTH, which offers medical services to patients with different medical problems including HIV infection.

- **People living with HIV/AIDS**: These are clients/patients who are HIV+ and have decided to come in the open to lead positive lives with their HIV status to help and support fellow patients who go into denial, when they learn of their HIV+ status, to accept and copy up with it.

- **University Teaching Hospital**: Is Zambia’s largest health institution
1.9 VARIABLES AND CUT-OFF POINTS
A variable is an attribute that can have more than one value such as height, weight and blood pressure (Dempsey and Dempsey, 2000). The variables identified in this study are information, education and communication, frequency of teaching HIV infected persons and AIDS patients on preventive and control measures of HIV infection, gender and patients' education levels.

1.9.1 Independent Variable
This is variable is believed to cause or influence the dependent variable (Dempsey and Dempsey, 2000). In this study, the independent variables are frequency of teaching HIV patients on preventive and control measures of HIV infection, gender of patient and level of education of the patients.

1.9.2 Dependent Variable
This is a variable that changes as a result of manipulation of the independent variable. The dependent variable in the study is IEC.
### 1.9.3 VARIABLES, INDICATORS AND CUT-OFF POINTS

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<td>Frequency of</td>
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<td>Patient has low of education or abilities to understand some facts on HIV</td>
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CHAPTER 2

2.0 LITERATURE REVIEW

2.1 INTRODUCTION
Literature review is a summary of research on a topic of interest. It is prepared to put a research problem in context or as the basis for an implementation projection (Polit and Hungler, 1997). The purpose of literature review was to determine what was already known about the topic under study and gave a comprehensive picture of the state of knowledge on the topic which revealed the magnitude of the importance of information, education and communication programmes in the prevention and control of HIV. It also gave the researcher clues to the methodology and select the right tools/instruments to use to collect data, and also assisted the researcher refine certain parts of the study.

The literature review focused on the information, education and communication given to patients living with HIV and AIDS. It is further aimed at looking at what is taught to people living with HIV and AIDS, whether they are given IEC on the subsequent visits or not. It also looked at what could be the other factors that contribute to patients’ failure to adhere to or comply with the information given. The literature is, therefore, discussed and presented from the works of previous researchers around the world. Therefore, it is arranged in three parts; global, regional and national perspectives.

2.2 GLOBAL PERSPECTIVE
Globally, IEC giving has been accepted as a cardinal strategy in the prevention and control of HIV and AIDS (AIDS in Africa, 2002). It forms the major focus for the control of HIV transmission among the risky groups aiming at changing their risky behaviors. There is no study so far which has been done to assess the IEC given to HIV and AIDS patients from patients’ perspective.
The adoption of IEC as the best solution to the problem of AIDS world wide has been as a result of the fact that AIDS is a serious infectious disease with very high case fatality ratio. At present, there is no medicine or cure for it but it can be prevented. Since the commonest transmission method of HIV is through sex, IEC given to HIV and AIDS patients is aimed at preserving one’s moral integrity or abiding by sexual ethics in order to prevent and mitigate the impact of HIV infection and prevent its transmission. If IEC does not stress on the use of condoms correctly both for prevention of unwanted pregnancy and to reduce the risk of being infected with AIDS and STIs, there will be no early treatment of STDs. This may further increase the risk of being infected with HIV among those individuals who are HIV negative. For these reasons, IEC is an important aspect of HIV and AIDS prevention and control to help and care for those infected, prevent the further spread of the HIV infection to those who are HIV negative and not to discriminate against the people who are infected (HIV/AIDS for East and Southern Africa, 2001.).

When IEC is not adequate, its impact on the prevention and control of HIV infection cannot be achieved. This is because patients may not comply with it leading to further spread of the virus and even the development of resistant strains to the ARVs. According to AIDS Africa (2002), studies were done in different countries, which include Thailand, China and Ivory Coast on IEC to assess the impact of IEC given as a key intervention to the fight against HIV pandemic and determine factors important in the client’s effort to comply with and adhere to IEC. In Thailand, the study revealed that IEC messages on use of condoms among the commercial sex workers and the military personnel had an effective control of sexually transmitted diseases, which include HIV. However, the impact of the IEC on the control of HIV infection depended on how frequency the people living with HIV are taught on HIV prevention and control measures. In China, the analysis revealed that there are other independent factors that interfere with the provision of IEC to HIV infected people even if they are taught at initial visit to the hospital. These factors influenced HIV infected individuals'
abilities to accept the HIV basic facts or not. When commercial sex workers, who are also HIV infected, do not accept to use condom, for fear of reducing the demand for their business or rejection, there will be further spreading of the HIV infection. The findings concluded that anti-commercial sex worker programme never worked because the HIV+ patients were not frequently taught on preventive messages. This led to clients’ failure to accept the control of HIV programme.

From these studies, we can say that health workers must have been providing IEC services to the people living with HIV and AIDS at initial visit to the health facility but IEC was not constantly given. This might be confirmed by the fact that HIV+ patients continued to spread the HIV infection as they continued to seek medical attention for diseases like STIs, since STIs are co-factors of HIV infection transmission. This can apply to the Zambian situation. If IEC is not adequate and re-enforced onto HIV and AIDS patients, they are most likely not going to adhere to or comply with it.

The IEC given to patients on ARVs help them to realize the benefits of understanding the disease process, treatment and other basic requirements like taking food before or after taking some drugs for better efficacy. A study conducted in United Kingdom (UK), London clinics assessing whether IEC given to patients taking the three drug combination of protease made them believe that they are no longer infectious and can not practice safer sex with their partners. The study results revealed that people were seeking HIV testing services at the clinic because their colleagues were taught benefits of early treatment. It also revealed that compliancy to safer sex among HIV positive individuals depended on their attitudes and feelings. Patients may practice safe sex when they felt like even if they were educated on ways and means of preventing further spread of infections to other. Therefore, when the content of IEC given to patients is not adequate, they cannot make constructive informed decisions inline with their health. Some of them may think that they are cured with ARVs they take, and they will not use the condom for prevention of the
spread of the disease or stick to their usual sexual partners, leading to many more new cases being reported. They may stop taking ARVs which they are expected to take for a long period of time (AIDS in Africa, 1997).

This can apply to our own Zambian population as people may seek HIV test due to information they discussed with their colleagues in residential areas. They may have heard of new drugs or the free ART services (MOH, 2006) provided in Zambia that their colleagues were taught. They may want to benefits from the early resumption of treatment and may hoping to be cured if found HIV positive as they heard from their colleagues. The patients’ expectations and assumptions were a clear sign that, possibly, the IEC was given, but it was not given constantly and when giving it, it was inadequate. If patients were given adequate IEC, they were going to know that they are still highly infectious even if they are taking these ARVs. Therefore, they were going to take precaution to prevent the spread of the disease to non-infected sex partners.

Disclosure is one of the topics stressed on in the management of patients with STIs and HIV. This facilitates the early diagnosis and treatment of STIs and HIV. Patients find some difficulties in disclosing their HIV status to their relatives. This could be due to various factors such as health worker misinformation, insufficient information delivered to patients, the health providers may not be trained in skills of teaching HIV and AIDS patients or due to personality attributes for both health worker and patients. A study conducted in UK Department of Health evaluated the feasibility and effectiveness of encouraging patients to disclose their HIV status to someone. A total of 471 HIV positive patients’ records were reviewed in the study. From these documents, it was revealed that 75% of participants’ records indicated that patients disclosed their status at least to one person. Meanwhile, 25% of the patients refused to notify their sex partners.

These study result show that even if the majority of newly diagnosed patients are given adequate IEC, HIV partner notification was not undertaken by a smaller proportion of patients. Different reasons were given for failure to disclose and
these include some patients though it was inappropriate to talk about one’s status with another person, while others were physically unwell or they appeared to be too ‘emotionally distressed’ to talk about their HIV status. Others could not be reached because they defaulted or were transferred to other clinics after being diagnosed with HIV. This could be attributed to the inadequate IEC given to these patients and it could not influenced their behaviors positively which contributed to their failure to comply with IEC. If IEC is not adequate, patients will not see the need to confide their status in someone who can help them go to the hospital when they are weak and not able to walk alone. This can be tied with 1.2% patients who did not turn up for monitoring in the month of June 2007.

Information and education of patient on HIV facts is imperative in an effort to make patients be well informed and derive some benefits. This helps to fight stigma, rejection and discrimination against the people living with HIV and AIDS. According to the Support group meetings and Toronto Collective studies (2006), IEC given to HIV and AIDS patients helps them to appreciate the issues surrounding the disease. The researchers say “their part of Mandate is to help people better be informed about complying with IEC which stresses that HIV is the cause of AIDS”. The support groups achieved this by providing support through counseling and education to people who have been labeled “HIV positive”. They achieve it by teaching and encouraging patients to understand that their diagnosis is not a death sentence, but one day a cure for HIV may be found as science is forever evolving.

Information and education given to people living with HIV and AIDS should put much emphasis on the facts that there is no drug for curing or effective vaccine to prevent the disease. In India, a cross-sectional study was conducted (Manish, Deok and Gupta, 2007) to evaluate the effects of health education on persons living with HIV. The study revealed that the sources of information for most of the patients (64.1%) were friends and relatives and the majority of them received wrong information which made them make wrong decisions. Majority of the subjects were illiterate and education affected the levels of knowledge related to
HIV and AIDS. There was also significant effect of sex education and education regarding transmission and prevention of STIs using the condoms, that is, about 59.32% patients never used the condom. The study further reported that 8.92% had knowledge on HIV and only 5.53% new the role of condom in the prevention of HIV (Manish, Deok and Gupta, 2007).

The study revealed that there are significant effects of sex education regarding transmission of HIV infection, but it was affected by patients' knowledge and attitude towards HIV infection. Also source of information about HIV and AIDS and illiteracy status of subjects affected knowledge and attitude. Therefore, findings recommended the need to teach HIV infected persons about sex and prevention of HIV, to accept and cope with the diagnosis, and prevent serious reactions such as suicide or long term depression. When the education is not constant, persons living with HIV will not visit the health facilities frequently and regularly, since they are not taught the importance of subsequent reviews. This may compromise adherence to and compliance with the IEC given.

Many patients living with HIV may not be educated and may learn HIV and AIDS issues from their friends and relatives, probably due to lack of adequate health facilities or due to long distance to the hospital. This can affect the patients' understanding of HIV and AIDS facts.

Information, education and communication is important in teaching HIV and AIDS patients taking combination of traditional and alternative medicine in the treatment of chronic illnesses like HIV-positive patients. This is critical because the patients who are infected with HIV tend to use other remedies as immunity boosters like traditional herbals and Chinese drugs just to mention a few, together with ARVs. The relationship between IEC and taking of traditional medicine combined with antiretroviral therapy was analyzed after collection of data from 366 HIV positive women aged 18-50 years with an effort to reduce risky behavior. It was found that about 1.69 times patients who were taking traditional medicines in combination with ARVs were more likely to miss their
ARVs doses in the last 30 days than those who were on ARVs only. The findings provided preliminary evidence that patients using traditional medicines together with ARVs did not seek medical services leading to non-adherence to IEC given. Therefore, the health care providers should teach HIV issues and provider adequate information to HIV infected patients so that they can seek medical services promptly and taking ARVs correctly. This may improve the quality of their lives and may boost their immunity (Smith, Diclemente and Wingood, 2007).

2.3 REGIONAL PERSPECTIVE
The HIV and AIDS epidemic has its greatest impact in sub-Saharan Africa, where a disproportionate number of HIV and AIDS infection has occurred. The magnitude of the epidemic in the region of East and Southern Africa is high, especially in the rural areas as being increasingly affected (HIV/AIDS for East and Southern Africa, 2001.). The provision of IEC to HIV positive patients helps in raising HIV infection awareness among HIV infected persons so as to prevent complications of HIV infection to those infected. The use of IEC in prevention of HIV infection transmission ensures that an un-educated HIV+ patient benefit from the education sessions so that they learn more on the disease. Hence, the need to intensify the IEC programmes so that there is comprehensive control and prevention of HIV infection.

A study conducted in Abidjan, Ivory Coast, (AIDS in Africa, 2002) revealed that IEC which HIV infected people received was focused on the need for behavior change and treatment of STIs, among the high prevalence or ‘core group’, who are sex workers. This was to reduce STIs and HIV incidences among those patients who complied with IEC. The report revealed that IEC given was being challenged by the peer influences. The individuals were found not adhering to the provided IEC due to peer pressure, leading to continued reports of new STIs among the HIV infected sex workers. This could probably be due to patients’ personality attributes.
The IEC given to HIV positive patients is aimed at preventing further spread of infection in the community and mitigate the impact of HIV on the population. A study conducted in Miz Gosab Research Centre (Ethiopia), Muhimbili University College of Health Sciences (Tanzania) and Zambart Project (Zambia) revealed that IEC focusing on a change of behavior in managing people living with HIV and AIDS is imperative. This can be achieved when the health workers, provide comprehensive IEC on HIV to both the community and the patients. If the IEC given to people living with HIV and AIDS is not continuously and does not involve the relatives, patients are most likely not going to change their behaviors. This is because HIV infected and AIDS patients require continuous teaching in order for them to learn new ideas and then lead a healthy life (Kidd and Clay, 2003).

If HIV patient does not talk about their HIV status to his/her partner, they are likelihood that transmission may continue as the disclosure of one’s HIV status to the partner might lead to stigma, rejection in the family and many more new cases may be reported. A study conducted in Soweto- South Africa in 2004 by Garson (2005), revealed that heath workers did not teach HIV and AIDS patients the importance of disclosure. This made it difficult for patients to disclose their HIV status to their partners and families fearing rejection and isolation. This resulted in patients failing to comply with the IEC given.

Another study conducted in Botswana, Uganda, Lesotho, South Africa and Swaziland on factors that many women, particularly married women, despite their HIV status, cannot control the circumstances under which sex takes place. This is because they are unable to negotiate for sex and condom use with their husbands who may be having extra-marital partners and they are more frequently exposed to sexual intercourse within marriage. Even if she taught adequate IEC, the woman may not appreciate it due to her inability to negotiate for safer sex. The research also showed that so far many young girls, first sex experience is forced or coerced, thus they cannot demand for safer sex as they may not know the HIV status of their sex partner. Even if the man knows his status, he may go ahead to have sex with a minor and then infect her. This may
confirm the fact that HIV and AIDS patients tend not to follow the advice they are usually given (National ART, 2005).

Generally, the IEC given to people living with HIV should cover all aspects that patients need to be taught about. Since sexual intercourse is the most common mode of transmission, it should be taught to patients in detail and at length. According to the advocacy workshop on IEC, conducted in Funafulu Tuvalu, certain aspects were brought out for consideration. These issues include sex education, lack of communication, gender balance in issues of HIV infection and male involvement in reproductive health in the provision of IEC. This is aimed at strengthening the delivery of IEC among AIDS patients and encouraging them to adhere to IEC as they go to their respectful places where there is no health worker to supervise them. The workshop participants at the workshop also advocated for ultimate introduction of sexual education in the school programmes to supplement the health education given by health workers (Ezekier, 1999). If HIV and AIDS patients are not taught adequately on HIV prevention and control measure, they are not likely to participate in preventing the transmission and mitigation of the HIV impact on the society.

2.4 NATIONAL AND LOCAL PERSPECTIVE
A lot of studies have been done on HIV and AIDS management in general but there has been no study done on the assessment of IEC given to HIV and AIDS patients, though HIV infection is a serious health problem in the country (WHO, 2001). This calls for health workers to intensify programmes on the prevention and control of HIV infection through IEC. Due to high risks of transmitting the HIV infection, HIV infected patients should be taught the importance of preventing themselves from being infected with STIs. Therefore, it is the responsibility of health workers to provide comprehensive IEC to patients during the education and counseling sessions and during the follow up visits, to encourage them to comply with the information given. If people living with HIV are not educated about HIV disease, re-enforcing the healthy living and encouraging patient compliance will be difficult.
Teaching patients on HIV disease should be continuous. Health workers, by virtue of their profession, are counselors and they are required to utilize every moment they come in contact with the patient for counseling (MoH, 2001). When counseling process is less valued by patient, change of behavior among HIV positive patients will not occur as desired, compromising adherence. This could be as a result of un-detailed content of IEC given to patients.

The Zambia/Norwegian Nurses Association HIV and AIDS project for nurses and midwives is Zambia (2004), stressed that IEC was one of the main strategies for prevention of the HIV and AIDS negative consequences at workplaces, and it should be given in privacy. If the education sessions do not take place in privacy, the health workers may not teach patients on certain sensitive issues like sex. This will lead to inadequate IEC given to patients. Zambia/Norwegian Nursed Association HIV and AIDS project (2005), further reports that currently, IEC which health workers deliver to HIV positive patients is very important as it is the primary focus in prevention of HIV infection in the absence of a cure and vaccine for HIV. If the IEC given is not adequate patients are most likely not going to comply with it because they may not comprehend the information given. The project further reports that IEC on HIV prevention should include and stress on abstinence from sexual activities before marriage and promotion of condom use every time one is having sexual intercourse.

Informal discussions with health workers in the Medical and STIs Clinic reveals that patients who are HIV positive still present to health facility with new STIs infections and in some cases women conceive without adequate preparations with the physicians to change their treatment regime for those who are on ARVs. This may occur even if the patient was adequately informed and educated on the infection or it could be that the patient is not aware of the need to seek medical advice before conceiving as she might have not been taught during counseling session.
Currently, most of the patients seeking medical services in health institutions are presenting with HIV and AIDS related conditions. According to MOH (2006) HIV and AIDS is the major cause of morbidity and mortality. In order to combat this, IEC was identified to be the major strategy that could be employed in the prevention and control of transmission. The study revealed that health workers taught the prevention and control messages to HIV and AIDS patients, but these messages were consistently being blocked by local, traditional and political leaders in the country. Despite significant financial support from global funds, a good number of health care workers trained in teaching and caring for HIV infected persons, there is still lack of adequate awareness of HIV and AIDS issues and service benefits among the citizens, seen mainly in Zambezi district. The study also revealed that there is still lack of specialized health services in some health centres. This implies that that patients are not taught adequate IEC and IEC is not given constantly. In some cases, patients are referred to second level hospitals after possible intense education and counseling leading to inaccessibility of the HIV services as they may not manage to go to the hospital they were referred to. This can compromise the IEC given to patients leading to non-adhering and not complying with it.

Lack of skills in ART services can lead to inadequate IEC provision to patients who needs it. CSO and MOH (2006) estimated that health providers are not well trained in HIV and AIDS and ART service delivery. About half of the health facilities visited in the country offering HIV and AIDS and ART services had only one staff who received training in ART services and in IEC provision to educate patients on the importance of adherence to ART. This scenario can affect the content and adequacy of IEC provided to HIV and AIDS patients at health facilities as one health care provider trained in caring for AIDS patients cannot copy to teach the ever-growing number of HIV infected persons.

Tutu’s article in the Health Journal (2007) reported that IEC provided by health worker is aimed at promotion of safer sex and prevention of HIV transmission through the condom use. But there is a reduction in condom use in the country to
about 5%. This is attributed to so many factors which poor IEC could be one of them. This is because adequate IEC given to patients make them be knowledgeable and make informed decision about their behavior even if they encounter difficulties resulting from peer pressure. It is the responsibility of health care worker to intensify education to HIV positive patients through IEC on the prevention of further disease transmission with use of condom every time they have sex. Even if reduction in condom use has been attributed to the shift of HIV and AIDS interventions which have become increasingly on promoting treatment and care for people living with HIV and AIDS, the impact of IEC to patients receiving ART on practicing safe sex is important. When there is the presence of new HIV infection and other STIs, it is evident enough that condom use is not widely used. Therefore, the health workers have the mandate to continue teaching and stressing the important of condom use in the prevention of HIV transmission. The reduction in the condom use is compromising the prevention and control of the disease in the community.

Banda (2007), the HIV and AIDS focal person and Ministry of Health spokes person pointed out that IEC given to people living with HIV/AIDS is very important. This is because it helps the patient to be well informed and be able to comply with advice given and makes self-centered decisions on their care. During the kwacha good morning interview presented on 14\textsuperscript{th} July, 2007, Banda said that one of the factors perpetuating HIV infection is the poor competences in the provision of IEC by health workers even if they are well trained, especially in the fight against stigma, encouraging patient monitoring and the need for adherence. The health workers tend to relax and are fond of exhibiting apathy behavior towards patient teaching and care. If IEC given is inadequate, HIV and AIDS patients may be stigmatized especially at home. This makes patients go into cocoons which prevent them from participate and contribute positively to the development of the country. If Rejection, stigma and discrimination continue among health workers themselves, it can lead to continued existence of these vices in the community, especially if IEC is inadequately delivered.
2.5 CONCLUSION
From the discussion above, generally, the IEC given to patient has a great impact on the behavior of the patient living with HIV and AIDS. The IEC given is seemingly inadequate, leading to patient not adhering to it, resulting in serious health problems for both the patient and the country at large. This may be attributed to several factors. Some of the factors could be inadequate specialized laboratory services in some health facilities, attitude of health care providers, cultural/traditional practices disregarding the implications of HIV disease on the society, education levels of patient, gender and age of the patient. However, from the studies done worldwide, behavior of the HIV positive patient tend to change as they accept and cope with HIV and AIDS diagnosis. It is hoped that other contributing factors to poor compliance with IEC by HIV positive patients will be identified and these will be used to make further recommendations to the relevant authorities and community on how to improve the IEC service for HIV infected patients.
CHAPTER 3
3.0 RESEARCH METHODOLOGY
3.1 INTRODUCTION
Research methodology is a system of studying (Walter, 2005). It involves identifying research design, research tool, research techniques and sampling techniques to be used in the study, pilot study to be done and ethical consideration.

3.2 RESEARCH DESIGN
The research design is the plan, structure, and strategy of investigations of answering the research question. It is the overall plan or blue print the researchers select to carry out their study.

In this study, the researcher used a descriptive study design. This was chosen for this study because it was going to describe the content of IEC given to HIV and AIDS patients, how frequent the IEC was given and what could be other factors contributing to non-adherence to IEC. It involved systematic collection and presentation of data to give a clear picture of the content of IEC given to people living with HIV.

3.3 RESEARCH SETTING
Research setting is the physical location and conditions in which data collection takes place in the study (Polit and Hungler, 1997). The study was conducted at University Teaching Hospital (UTH), which is Zambia’s largest health institution. The hospital is situated on Nationalist Road in Lusaka. It occupies about 80 hectares of land. The study was conducted specifically in Medical Clinic which is part of the Specialist Block, offering specialized health services. Within UTH, there are different wards which make up the Department of Medicine. Patients who are discharged from the medical wards are reviewed in the Medical Clinic. Within the Medical Clinic, there is a HAART Clinic that offers HIV and AIDS services like monitoring of blood levels of the viral load, CD4 cell count and the liver function tests for those patients on ARVs. Patients who need to receive
ARVs and those who are already on treatment are also attended to in the HAART Clinic. It is from this research setting where the researcher obtained the participants for the study. This study setting was chosen by the researcher because it has the largest population of HIV and AIDS patients as it offers the specialised HAART services listed above.

3.4 STUDY POPULATION
A study population is the total population of individuals meeting the designed criteria of interest to the researcher (Dempsey and Dempsey, 2000). The target population in this study consisted of all HIV positive patients/clients seeking health services from Medical Clinic in UTH. Participants aged 15 and above were included in the study but those patients who were very sick and needed not to be disturbed were excluded from the study. Clients were not forced to participate in this study, therefore, only those who were willing to participate were included in the study.

This target group was appropriate because it is the direct recipient of the information, education and communication, and their input would help in relating the variables in the analysis diagram.

3.5 SAMPLE SELECTION
Sampling method is the process of selecting a number of individuals from the delineated target population in such a way that individuals in a sample represent, as nearly as possible, the characteristics of the entire target population (Dempsey and Dempsey, 2000).

The participants in this study were selected using the simple random sampling method which is the most basic of the probability sampling design. Every member of the population had an equal chance of being selected into the sample (Polit and Hungler, 1997). The lottery, which is one of the simple random sampling, was used to select the sample. All the patients attending the HAART Clinic at UTH were given numbers written on small and identical pieces of paper
which were folded and put in a box and mixed thoroughly together by shaking the box. The papers were of the same size, colour and shape. Then, a one by one blind fold selection was made by the researcher and ten participants were picked daily until the study sample of 50 was reached. The method ensured that each participant had an equal chance of being included in the sample. This would enable generalisation of the findings be possible and it was also feasible in terms of time, human, financial and material resources.

3.6 SAMPLE SIZE
A sample size is the total number of subjects to represent the population under study (Polit and Hungler, 1997).

In this study, a total of fifty (50) HIV and AIDS patients attending HAART Clinic comprised the sample. The size was influenced by resource constraints which were limited time, inadequate human resource and financial resources.

3.7 DATA COLLECTION TOOL
A data collection tool is an instrument designed to collect information in any form useful to the researcher (Treece and Treece, 1986). It may take the form of questionnaire or interview schedule, checklist, focus group discussion, projected device or some other type of tool for eliciting information.

Data collection was done in September 2007 at the Medical Clinic in UTH. In this study, the data collection tool that was used is Structured Interview Schedule. An interview schedule is a questionnaire that is read to the respondent (Treece and Treece, 1986). The structured interview schedule was chosen because it is suitable for both illiterate and literate respondents and allowed for clarification of questions where the respondent was not clear. It was less costly, not time consuming and data analysis was easy.

The Interview Schedule contained four sections (Appendix 1). Section A dealt with demographic characteristics of the subjects who were included in the study. Section B had questions to measure the content of IEC which patients were
expected to receive. Section C measured variables for the frequency of teaching patients the facts about HIV and AIDS to enhance compliance and adherence. Section D measured other possible factors contributing to non-adherence to the IEC given to HIV and AIDS patients.

3.8 DATA COLLECTION TECHNIQUE

Data collection technique is the process of gathering information needed to address a research problem (Polit and Hungler, 1997). The interviews were being conducted from the office, allocated by the sister in-charge, which was made of concrete walls and was well arranged to maintain privacy and confidentiality. On each day, I was able to interview 5 clients and private was highly maintained as I ensured that on selecting clients for the interview, their colleagues did not know what was going to be done. The interviews were being conducted with the doors closed and I reassured my clients that I was not going to share with any person what we had discussed. Also, I informed the clients that I was not going to ask for their names or write down their name on the questionnaire.

In this study, an Interview Schedule was used to gather data. In an interview, the questions are pre-set (structured) and it is appropriate when the investigator is informed about the facts and the situation involved. The researcher was asking questions to the respondents orally in face-to-face format. Clarification of questions and answers were done but still maintaining the same meaning. The interview for this study consisted of both closed ended and open-ended questions.

However, the interview has some advantages and disadvantages.

3.8.1 Advantages

1. An interview is effective for obtaining opinions, attitudes, values, and perceived behaviour.
2. The researcher is able to observe non verbal cues from the patients and the questions can be clarified.
3. Depth of response can be assured since the researcher can pursue any question of special interest.
4. It enables the interviewee who does not understand one part of the question during the interview ask to have the question repeated, thus the researcher may clarify items by rewording them to make the questions more meaningful to other interviewees.
5. The amount and variety of information that can be elicited is increased at times.

3.8.2 Disadvantages

1. It is costly considering time involved in having an interview as compared to the self administered questionnaire. This is because interviews require long hours of effort, which would require assistance of specially trained staff. This factor adds to the cost of the project.
2. The interviewee has little or no choice in the date or place of interview while the investigator has little time in which to complete the research project.
3. The cost of interview depends on the number and length of interview. If much travelling is required, the transportation could be exorbitant, but if there is easy access to the sample, expenses may be minimal.
4. It may be difficult to make comparison of one interviewer's data with another's data unless rigid procedures are followed at all times.
5. Bias may result because of differences in question order, which would invalidate some of the information obtained (Treece and Treece, 1986).

After sampling the respondents, verbal permission was sought from the clinic in charge and subjects. For the purpose of learning and accuracy, the researcher collected the whole data herself. Before interviews, the researcher introduced herself to the subjects. The purpose of this study was explained carefully to the
respondents, who were assured of confidentiality. This promoted rapport between the researcher and the participants.

3.9 VALIDITY AND RELIABILITY

3.9.1 Validity: According to Polit and Hungler (1997), validity is the degree to which an instrument measures what it is supposed to measure. In other words, validity is the strength of a design to produce accurate results. In this study, validity was ensured and measured as the research instrument was also reviewed by the research supervisor and a pilot study was carried out before the actual study.

3.9.2 Reliability: is the degree of consistency or dependability with which an instrument measures the attributes it is desired to measure (Polit and Hungler, 1997). The instrument was able to bring out the accurate information whereby the same instrument after sometime, would yield the same response.

In this study, the researcher used experts to review the instrument before it was administered. The questions were aligned in a sequence and were simple, concise and brief for further reliability to be ensured. This also helped to eliminate biases and minimized collection of unnecessary data.

3.10 PILOT STUDY

According to Polit and Hungler (2001), a pilot study is a small study or trial run, done in preparation for the major study. In other words, it is a small-scale study, which is conducted before the main study on a limited number of subjects selected from the same population as that of the actual study.

A pilot study was done at Chilenje Health Centre. It was conducted to assess the feasibility of the study and to make necessary adjustments to the Structured Interview Schedule to ensure reliability and validity. The pilot study also helped the researcher to investigate the feasibility of the proposed study and to detect possible flaws in the data-collection instrument. The aim of a pilot study was to
identify and correct errors that could be identified before the main study was conducted. A sample for a pilot study is 10% of the total anticipated study sample, which was 50, in this case. Therefore, the sample for the pilot study was 5. The 5 respondents were selected using the simple random sampling method.

3.11 ETHICAL AND CULTURAL CONSIDERATIONS
Ethics are a system of moral values that is concerned with the degree of which research procedure adhered to professional, legal and social obligation to the researcher subjects (Polit and Hungler, 1997).

The department of Post Basic Nursing approved the research proposal and allowed the researcher to conduct the study. Permission was sought from the Lusaka District Management, UTH Management and the respondents (Appendix 6). This was after explaining the purpose and nature of the study and what the results would be used for. The interviews commenced after the respondents, Lusaka District Management and UTH Management agreed. Participation in the study was voluntary. This is because participants were not forced to participate and after explaining what was to be done, they were asked to either agree or refuse to be interviewed. The researcher maintained confidentiality and anonymity by using serial numbers and not the names on the data collection tool.
CHAPTER 4

4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 INTRODUCTION

This chapter is focusing on the data analysis and presentation of information obtained. The purpose of this study was to assess the IEC given to HIV and AIDS patients.

4.2 DATA ANALYSIS

Data analysis is the process of carefully scrutinizing data by placing it in categories, calculating the mean, and applying statistical procedures (Treece and Treece, 1986).

After data was collected, all the questionnaires were sorted out and checked for completeness and internal consistency. Responses from closed ended questions were entered directly on the data master sheet, while those responses from open ended questions were coded and categorised before entering on a data master sheet for manual analysis. Data were further analyzed by use of a scientific calculator.

The data master sheet was partitioned into four categories. These were demographic data, content of IEC, attitude of health workers in giving IEC to patient and other factors which can prevent patient from not complying with the IEC given. The categories for content of IEC and frequency of receiving IEC were further categorized, into adequate and inadequate, and into at every visit and once at initial visit, respectively.

4.3 PRESENTATION OF FINDINGS

The results have been presented in frequency tables, bar charts, pie charts, graphs, line charts, and cross tabulations to show the relationships among variables as indicated from the next page.
Majority 21 (42%) of the respondents were in the age range of 36-45 years and 2 (4%) were in the age range of 15-25 years.

Table 2: RESPONDENT'S SEX

<table>
<thead>
<tr>
<th>SEX</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 28 (56%) of the respondents were men.
Table 3: RESPONDENTS' RESIDENTIAL AREA
(n=50)

<table>
<thead>
<tr>
<th>RESIDENTIAL AREA</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>High density area</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>Medium density area</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Low density area</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority 17 (34%) of the respondents stated that they live in high density area and another 17 (34%) stated that they live in a low density area.

Figure 3: RESPONDENT'S LEVEL OF EDUCATION
(n=50)

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary</td>
<td></td>
<td>34%</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td>48%</td>
</tr>
<tr>
<td>Went up to Grade 7</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Never been to School</td>
<td></td>
<td>8%</td>
</tr>
</tbody>
</table>

**RELATIVE FREQUENCY (%)**

The figure shows that majority of the respondents 24 (48%) attained secondary education and 4 (8%) had never been to school.
Table 4: RESPONDENTS’ OCCUPATION  
(n=50)

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Unemployed</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Self employed</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority 26 (52%) of the respondents were employed while 12 (24%) were unemployed and the other 12 (24%) were self-employed.

Table 5: RESPONDENTS’ DENOMINATION  
(n=50)

<table>
<thead>
<tr>
<th>DENOMINATION</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seventh-Day Adventist</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>United Church of Zambia</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Roman Catholic</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>Reformed Church in Zambia</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Pentecostal church</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>New Apostolic</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority 21 (42%) of the respondents belonged to Pentecostal Churches of Zambia and only 1 (2%) belonged to New Apostolic Church of Zambia.
Figure 4: RESPONDENTS’ MARITAL STATUS (n=50)

Majority 32 (64%) of the respondents were married and 3 (6%) were single.

SECTION B: CONTENT OF IEC

TABLE 6: RESPONSES ON WHETHER CLIENTS WERE TAUGHT ON BASIC INFORMATION ON HIV (n=50)

<table>
<thead>
<tr>
<th>BASIC INFORMATION ON HIV</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority of respondents 42 (84%) stated that they were taught and 8 (16%) stated that they were not taught on the basics about HIV.
Figure 5: RESPONDENTS' RESPONSES ON WHETHER THEY WERE TAUGHT THE EFFECTS OF HIV ON IMMUNITY (n=50)

Majority of the respondents 36 (72%) stated that they were taught that HIV lowers immunity and 14 (28%) of the respondents stated that they were not taught the effects of HIV on immunity.

Table 7: RESPONSES ON WHETHER CLIENTS WERE TAUGHT WAYS TO AVOID SELF RE-INFECTION AND INFECTING OTHERS (n=50)

<table>
<thead>
<tr>
<th>AVOID SELF RE-INFECTION AND INFECTING OTHERS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41</td>
<td>82</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 41 (82%) of the respondents stated they were taught on how to prevent spreading infection to other people.
Figure 6: RESPONSES ON WHETHER CLIENTS WERE TAUGHT ON THE
METHOD OF PREVENTING SPREAD OF INFECTION TO OTHERS
(n=50)

I do not Know
Abstinence
Never Share
Razor blades
Use of Condom

RELATIVE FREQUENCY (%)

38 (76%) of the respondents stated that they were taught to prevent
transmission of HIV infection to another person by the use of a condom during
sex, 6 (12%) stated that they were taught to abstain from sex.

Table 6: RESPONSES ON WHETHER CLIENTS WERE TAUGHT ON THE
TYPE TO FOOD TO BOOST THEIR IMMUNITY
(n=50)

<table>
<thead>
<tr>
<th>TYPE OF FOOD TO TAKE FOR IMMUNITY BOOST</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance diet</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Never taught</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

10 (20%) of the respondents stated they were taught the type of food to
take to boost their immunity, 20 (40%) stated that they were not taught the
type of food to take.
Figure 7: RESPONSES ON WHETHER CLIENTS WERE TAUGHT THE IMPORTANCE OF DISCLOSURE (n=50)

CLIENT'S RESPONSES

36 (72%) of the respondents stated that they were taught and 14 (28%) stated that they were not taught on the importance of disclosing their HIV status to a person of their choice.

Table 8: RESPONSES ON WHETHER CLIENTS WERE TAUGHT ON THE TYPE TO FOOD TO BOOST THEIR IMMUNITY (n=50)

<table>
<thead>
<tr>
<th>TYPE OF FOOD TO TAKE FOR IMMUNITY BOOST</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance diet</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Never taught</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 30 (60%) of the respondents stated they were taught the type of diet to take to boost their immunity, 20 (40%) stated that they were not taught on the type of food to take.
Table 9: RESPONSES ON WHETHER CLIENTS WERE TAUGHT DURATION OF TAKING ARVS (n=50)

<table>
<thead>
<tr>
<th>DURATION OF TAKING ARVS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a life long</td>
<td>32</td>
<td>64</td>
</tr>
<tr>
<td>Don’t know</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 32 (64%) of the respondents stated that they were taught that ARVs are to be taken for a long-term, while 15 (32%) stated that they were not taught the duration.

Figure 8: RESPONSES ON WHETHER CLIENTS WERE TAUGH THAT ARVS CAN BE SHARED (n=50)

![Bar chart](image)

Majority 42 (84%) of the respondents stated that they were taught that ARVs cannot be shared with any other person, 8 (16%) stated that they were not taught whether they can be shared.
Table 10: RESPONSES ON WHETHER CLIENTS WERE TAUGHT THAT ARVS CAN CURE HIV
(n=50)

<table>
<thead>
<tr>
<th>ARVs CAN CURE HIV</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>82</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 41 (82%) of the respondents stated that they were taught that the ARVS can not cure HIV infection, 9 (18%) stated that they were not taught that ARVs can not cure HIV.

Table 11: RESPONSES ON WHETHER CLIENTS WERE TAUGHT THE TIME TO TAKE ARVS
(n=50)

<table>
<thead>
<tr>
<th>TIME TO TAKE ARVS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>After food</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Before food</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>At time I have set my self</td>
<td>39</td>
<td>78</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 39 (78%) of the respondents stated that they were not taught time of taking drugs, 7 (14%) stated that they were told to take drugs after food and 4 (8%) stated that they were told to take their drugs before food.
Table 12: DESCRIBING CLIENTS' SCORES ON THE CONTENT OF IEC (n=50)

<table>
<thead>
<tr>
<th>DESCRIBING THEIR SCORES ON THE CONTENT OF IEC</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>Inadequate</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority 27 (54%) of the respondents had received inadequate IEC, while 23 (46%) had received adequate.

SECTION C: FREQUENCY OF BEING TAUGHT IEC

Figure 9: RESPONSES ON WHETHER CLIENTS WERE TAUGHT THE IMPORTANCE OF SUBSEQUENT VISITS (n=50)

Majority 43 (86%) of the respondents states that they were taught the importance of subsequent reviews while 7 (14%) stated that they were not.
Table 13: RESPONSES ON WHETHER CLIENTS HAVE EVER MISSED AN APPOINTMENT (n=50)

<table>
<thead>
<tr>
<th>EVER MISSED AN APPOINTMENT</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>TOTALS</td>
<td>25</td>
<td>100</td>
</tr>
</tbody>
</table>

The table shows that 25 (50%) of the respondents stated that they missed the appointment and 25 (50%) stated that they have never missed an appointment.

Figure 10: RESPONSES ON WHETHER WHY CLIENTS MISSED THE APPOINTMENT (n=25)

Majority 12 (48%) of the respondents stated they missed appointments for no reasons while 6 (24%) of the respondent missed appointment because they went out of town and left their document back home.

47
Table 14: RESPONSES ON HOW FREQUENTLY CLIENTS CAME FOR REVIEWS
(n=50)

<table>
<thead>
<tr>
<th>FREQUENCY OF CLIENT'S REVIEWS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 month</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>2 months</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3 months</td>
<td>34</td>
<td>68</td>
</tr>
<tr>
<td>6 months</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 34 (68%) of the respondents stated that they were coming for review every after 3 months. 6 (12%) stated that they come for every 6 months.

Figure 11: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON ADHERENCE
(n=50)

Majority 30 (60%) of the respondents stated that they were taught on the importance of adherence at every visit and 20 (40%) stated that they were not taught once at initial visit.
Table 15: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON BASIC INFORMATION ABOUT HIV AND AIDS
(n=50)

<table>
<thead>
<tr>
<th>ON BASIC INFORMATION ABOUT HIV AND AIDS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every visit</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>23</td>
<td>46</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 27 (54%) of the respondents stated that they were taught on the basics about HIV and AIDS at every visit and 23 (46%) stated that they were taught only once at initial visit.

Table 16: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON DISCLOSURE AND SUPPORT
(n=50)

<table>
<thead>
<tr>
<th>ON DISCLOSURE AND SUPPORT</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every visit</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

25 (50%) of the respondents stated that they were taught on the importance of disclosure and support at every visit and the other 25 (50%) stated that they were only taught once at initial visit.
Figure 12: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON NUTRITION (n=50)

Majority 24 (44%) of the respondents stated that they were taught on the importance of nutrition at every visit to the clinic and 9 (18%) stated that they have never been taught at all.

Table 17: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON WHAT TO DO TO HAVE CHILDREN WHEN ONE IS HIV POSITIVE (n=50)

<table>
<thead>
<tr>
<th>WHAT TO DO TO HAVE CHILDREN.</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Visit</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Never taught</td>
<td>27</td>
<td>54</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Majority 27 (54%) of the respondents stated they were not taught at all on what to do to have children when someone is HIV positive and 11 (22%) stated that they were taught once at initial visit.
Figure 13: RESPONSES ON HOW FREQUENTLY CLIENTS WERE TAUGHT ON THE IMPORTANCE OF HEALTH LIVING

(n=50)

Relative Frequency (%)

Majority 31 (62%) of the respondents stated that they were taught on the importance of healthy living every visit, 13 (26%) stated that they were taught once at initial visit and 6 (12%) stated that they have never been taught at all.
### Table 18: RESPONSES ON HOW FREQUENTLY WERE YOU TAUGHT ON THE IMPORTANCE OF TAKING ARVS CORRECTLY

<table>
<thead>
<tr>
<th>IMPORTANCE</th>
<th>TAKING ARVS</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every visit</td>
<td>35</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>8</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Never taught</td>
<td>7</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

 Majority of the respondents 35 (70%) stated that they were taught on taking the ARVs correctly at every visit, 7 (14%) stated that they have never been taught at all.

**Figure 14: DESCRIBING SCORES ON THE FREQUENCY OF IEC DELIVERY.**

(n=50)

![Bar Chart]

**CLIENT'S RESPONSES**

Majority of the respondents 29 (58%) were not frequently taught IEC and were taught once only at initial visit the clinic, while 29 (42%) were frequently taught.
SECTION D: FACTORS WHICH INFLUENCE FAILURE TO COMPLY WITH IEC GIVEN TO HIV/AIDS PATIENTS.

Table 19: RESPONSES ON THE FACTORS CONTRIBUTING TO FAILURE TO FOLLOW THE GIVEN IEC (n=50)

<table>
<thead>
<tr>
<th>FACTORS CONTRIBUTING TO FAILURE</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of commitment to own health</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Pressure from sex partners</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>When HIV client has sick relative to nurse</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Strict rules at place of work/prisons</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lack of information</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Poverty</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>If one is very sick</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>No response</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

 Majority 22 (44%) of the respondents never suggested what factors can make them fail to comply with the IEC, while 15 (30%) of the respondents stated that lack of commitment to one’s health can contribute to not complying with the IEC given.
Table 2O: RESPONSES WAYS OF IMPROVING THE HEALTH SERVICES OFFERED IN THE HAART CLINIC
(n=50)

<table>
<thead>
<tr>
<th>Ways of improving service in HAART Clinic</th>
<th>FREQUENCY</th>
<th>RELATIVE FREQUENCY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First services to be given to school going children</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Increase the number of doctors and nurses in the clinic</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Introduction of Saturday clinic for working class patients</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Lab results should be reviewed immediately they are ready</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Patients without complaints should be seen by the doctor twice in a year</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>There should be no drug shortages at the pharmacy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>All HAART services should be free as viral load test is still being paid for a K500, 000.</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Staff in the clinic should open the clinic on time</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>No responses</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>TOTALS</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority 24 (48%) of the respondents never gave any suggestions on how to improve the service in HAART Clinic, while 6 (12%) suggested that there is need to increase the number of health workers to run the clinic efficiently.
CROSS TABULATION

Table 21: ADEQUACY OF IEC IN RELATION TO AGE
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Age</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 to 25</td>
<td>26 to 35</td>
</tr>
<tr>
<td>Adequate</td>
<td>1 (50%)</td>
<td>9 (60%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>1 (50%)</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2 (4%)</td>
<td>15 (30%)</td>
</tr>
</tbody>
</table>

Majority 9 (60%) of the respondents who were aged between 26 and 35 had adequate IEC and 11 (52.4%) who were aged range of 36-45 also had adequate IEC. On the other hand, 10 (47.6%) of those aged 36 to 45 and 6 (50%) aged 46 and above had inadequate IEC.

Table 22: ADEQUACY OF IEC IN RELATION TO SEX
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Sex</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Adequate</td>
<td>12 (42.9%)</td>
<td>15 (68.2%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>16 (57.1%)</td>
<td>7 (32.8%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28 (56%)</td>
<td>22 (44%)</td>
</tr>
</tbody>
</table>

Majority 15 (68.2%) female respondents had adequate IEC, while 16 (57.1%) male respondents had inadequate IEC.
Table 23: ADEQUACY OF IEC IN RELATION TO RESIDENTIAL AREA
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Residential Area</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High density</td>
<td>Medium density</td>
</tr>
<tr>
<td>Adequate</td>
<td>10 (58.8%)</td>
<td>8 (50%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>7 (41.2%)</td>
<td>8 (50%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17 (34%)</td>
<td>16 (32%)</td>
</tr>
</tbody>
</table>

The table shows that majority 10 (58.8%) of the respondents who live in highly density area had adequate IEC on HIV and AIDS as taught by health care providers, 9 (52.9%) of those living in low density area and 8 (50%) of respondents who live in medium density area and also had adequate IEC. On the other hand, 8 (50%) of those living in medium density area and 8 (47.1%) of those who live in low density area had inadequate IEC.

Table 24: ADEQUACY OF IEC IN RELATION TO OCCUPATION
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Occupation</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed</td>
<td>Self employed</td>
</tr>
<tr>
<td>Adequate</td>
<td>15 (57.7%)</td>
<td>2 (16.7%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>11 (42.3%)</td>
<td>10 (83.3%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26 (52%)</td>
<td>12 (24%)</td>
</tr>
</tbody>
</table>

The table shows that majority 10 (83.3%) of the respondents who were unemployed had adequate basic information on HIV and ADIS, while 10 (83.3%) of those who were self-employed had inadequate IEC.
Table 25: ADEQUACY OF IEC IN RELATION TO EDUCATIONAL LEVEL
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Level of Education</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never been to school</td>
<td>Primary</td>
</tr>
<tr>
<td>Adequate</td>
<td>1 (25%)</td>
<td>1 (20%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>3 (75%)</td>
<td>4 (80%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4 (8%)</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>

The table shows that 4 (80%) of the respondents who attained primary education, and 3 (75%) who had no education had inadequate IEC. 11 (64.7%) who had tertiary education and 13 (54.2%) of the respondents who attained secondary education had adequate IEC.
Table 26: ADEQUACY OF IEC IN RELATION TO RELIGIOUS AFFILIATION  
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>RCC (56.3%)</th>
<th>RCZ (50%)</th>
<th>UCZ (50%)</th>
<th>New Ap (100%)</th>
<th>SDA (50%)</th>
<th>Pentecostal church (52.4%)</th>
<th>TOTAL (54%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>9</td>
<td>1 (50%)</td>
<td>3 (50%)</td>
<td>1 (100%)</td>
<td>2 (50%)</td>
<td>11 (47.6%)</td>
<td>27 (46%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>7 (43.7%)</td>
<td>3 (50%)</td>
<td>0 (0%)</td>
<td>2 (50%)</td>
<td>10 (47.6%)</td>
<td>6 (12%)</td>
<td>23 (46%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16 (32%)</td>
<td>2 (4%)</td>
<td>6 (12%)</td>
<td>1 (2%)</td>
<td>4 (8%)</td>
<td>21 (42%)</td>
<td>50 (100%)</td>
</tr>
</tbody>
</table>

The table shows that a respondent 1 (100%) who belongs to New Apostle and 9 (56.3%) had adequate IEC. Majority of the respondents 3 (50%) for UCZ and 2 (50%) form SDA had inadequate IEC.

Table 27: ADEQUACY OF IEC IN RELATION TO MARITAL STATUS  
n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>Single (66.7%)</th>
<th>Married (50%)</th>
<th>Divorced (80%)</th>
<th>Widowed (60%)</th>
<th>TOTAL (56%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>2</td>
<td>16 (50%)</td>
<td>4 (80%)</td>
<td>6 (60%)</td>
<td>28 (56%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>1 (33.3%)</td>
<td>16 (50%)</td>
<td>1 (20%)</td>
<td>4 (40%)</td>
<td>22 (44%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3 (6%)</td>
<td>32 (64%)</td>
<td>5 (10%)</td>
<td>10 (20%)</td>
<td>50 (100%)</td>
</tr>
</tbody>
</table>

The table shows that majority 4 (80%) of the respondents who were divorced and 2 (66.7%) of those who were single had adequate IEC, while 16 (50%) of those who were married respondents had inadequate IEC.
### Table 28: FREQUENCY OF RECEIVING IEC IN RELATION TO AGE.

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Age</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 to 25</td>
<td>26 to 35</td>
</tr>
<tr>
<td>Every visit</td>
<td>0 (0%)</td>
<td>6 (60%)</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>2 (100%)</td>
<td>4 (40%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2 (4%)</td>
<td>10 (20%)</td>
</tr>
</tbody>
</table>

The table shows that the majority 2 (100%) of the respondents aged 15 to 25 received IEC once at initial visit, while 6 (60%) of the respondents aged 26 to 35 receive IEC at every visit to the clinic.

### Table 29: FREQUENCY OF RECEIVING IEC IN RELATION TO SEX

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Every visit</td>
<td>13 (46.4%)</td>
<td>10 (45.5%)</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>15(53.6%)</td>
<td>12 (54.5%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>28 (56%)</td>
<td>22 (44%)</td>
</tr>
</tbody>
</table>

Majority 12 (54.5%) of the female respondents received IEC once at initial visit to the clinic, while 13 (46.4%) of the male respondents receive IEC at every visit to the clinic.
Table 30: FREQUENCY OF RECEIVING IEC IN RELATION TO RESIDENTIAL AREA

n=50

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Residential Area</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High density</td>
<td>Medium density</td>
<td>Low density</td>
<td>TOTAL</td>
<td></td>
</tr>
<tr>
<td>Every visit</td>
<td>6 (35.2%)</td>
<td>7 (43.8%)</td>
<td>10 (58.8%)</td>
<td>23 (46%)</td>
<td></td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>11 (64.7%)</td>
<td>9 (56.2%)</td>
<td>7 (41.2%)</td>
<td>27 (54%)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>17 (34%)</td>
<td>16 (32%)</td>
<td>17 (34%)</td>
<td>50 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Majority 11 (64.7%) of the respondents who live in high density areas received IEC once at initial visit to the clinic, and 10 (58.8%) of the respondents who live in low density residential areas receive IEC at every visit to the clinic.

Table 31: FREQUENCY OF RECEIVING IEC IN RELATION TO OCCUPATION

n=50

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Occupation</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed</td>
<td>Self employed</td>
<td>Unemployed</td>
<td>TOTAL</td>
<td></td>
</tr>
<tr>
<td>Every visit</td>
<td>10 (38.5%)</td>
<td>5 (46.7%)</td>
<td>6 (50%)</td>
<td>21 (42%)</td>
<td></td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>16 (61.5%)</td>
<td>7 (58.3%)</td>
<td>6 (50%)</td>
<td>29 (58%)</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>26 (52%)</td>
<td>12 (24%)</td>
<td>12 (24%)</td>
<td>50 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Majority 16 (61.5%) of the respondents who were formally employed had received IEC once at initial visit, while 6 (50%) of those who were unemployed receive IEC at every visit at the clinic.
Table 32: FREQUENCY OF RECEIVING IEC IN RELATION TO EDUCATIONAL LEVEL

n=50

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Level of Education</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Primary</td>
</tr>
<tr>
<td>Every visit</td>
<td>1 (25%)</td>
<td>1 (20%)</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>3 (75%)</td>
<td>4 (80%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4(8%)</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>

Majority of the respondents 4 (80%) who attained primary education received IEC once at initial visit, whilst 10 (41.7%) respondents with secondary education received IEC at every visit to the clinic.

Table 33:- FREQUENCY OF RECEIVING IEC IN RELATION TO RELIGIOUS AFFILIATION

n=50

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Religious affiliation</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RCC</td>
<td>RCZ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every visit</td>
<td>5 (44.7%)</td>
<td>1 (50%)</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>7 (58.3%)</td>
<td>1 (50%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12 (24%)</td>
<td>2 (4%)</td>
</tr>
</tbody>
</table>

A respondent 1 (100%) from New Apostolic Church and 2 (50%) from SDA receive IEC. Majority 19 (74.4%) of the respondents from other Pentecostal churches received IEC once at visit to the clinic.
Table 34: FREQUENCY OF RECEIVING IEC IN RELATION TO MARITAL STATUS.

n=50

<table>
<thead>
<tr>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>Marital status</th>
<th></th>
<th></th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single</td>
<td>Married</td>
<td>Divorced</td>
<td>Widowed</td>
<td></td>
</tr>
<tr>
<td>Every visit</td>
<td>1 (33.3%)</td>
<td>14 (43.7%)</td>
<td>2 (40%)</td>
<td>4 (40%)</td>
<td>21 (42%)</td>
</tr>
<tr>
<td>Once at initial visit</td>
<td>2 (66.7%)</td>
<td>18 (55.3%)</td>
<td>3 (60%)</td>
<td>6 (60%)</td>
<td>29 (58%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3 (6%)</td>
<td>32 (64%)</td>
<td>5 (10%)</td>
<td>10 (20%)</td>
<td>50 (100%)</td>
</tr>
</tbody>
</table>

Majority 2 (66.7%) of the respondents who were single received IEC once at initial visit to the clinic, and 6 (60%) of those respondents who were widowed also had received IEC once at initial visit. 14 (43.7%) of respondents who were married receive IEC every visit to the clinic.

Table 35: CONTENT OF IEC IN RELATION TO FREQUENCY OF RECEIVING IEC

n=50

<table>
<thead>
<tr>
<th>IEC</th>
<th>FREQUENCY OF RECEIVING IEC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Every visit</td>
<td></td>
</tr>
<tr>
<td>Adequate</td>
<td>9 (39.1%)</td>
<td>12 (44.4%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>14 (60.8%)</td>
<td>15 (55.5%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23 (46%)</td>
<td>27 (54%)</td>
</tr>
</tbody>
</table>

Majority 14 (60.8%) of the respondents who receive IEC at every visit to the clinic had inadequate IEC, while 12 (44.4%) who received IEC once at initial visit had adequate IEC.
CHAPTER 5
5.0 DISCUSSION OF FINDINGS
5.1 INTRODUCTION
This discussion of findings is based on a sample of HIV positive patients who were selected using the simple random sampling techniques. The purpose of the study was to assess the IEC given to HIV and AIDS patients seeking health services at the medical clinic in UTH. This discussion is based on the following study variables:
  o Demographic data
  o Content of IEC
  o Frequency of receiving IEC

5.2 DEMOGRAPHIC DATA
The questionnaire (Appendix 1) had questions from section A which elicited information on demographic characteristics of the respondents. The respondents' age ranged from 15 to 46 years and above. The results revealed that 42% of the respondents were in the age range 36-45 years, followed by those in the age range from 26 to 35 (30%). Twenty-four percent of the respondents were in the age group 46 years and above while 4% were in the age range from 15 to 25 years (Figure 2, page 37). More respondents were aged 36-45 probably due to the fact that many people in Zambia tend to marry and engage in sexual activities when they reach this age range (CSO, 2003). Sexual activity predisposes them to contracting HIV and other STIs, especially if they do not use condom as it is stressed in HIV infection prevention messages (MOH, 2005). This could also be attributed to the fact that HIV and AIDS is wide spread among adults in Zambia, with 16% infection rate (Ministry of Health report, 2005).

Most of the respondents (56%) were males, only 44% females, (Table 2, page 37). According to CSO census (2000), it revealed that there are more female (51%) than males (47%). This result does not agree with 2000 census findings. This could be attributed to the fact that the study sample had more males than females.

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Majority (34%) of the respondents live in high density area. This could be attributed to the fact that most of the people who have low socio-economic status live in high density areas where they can afford to rent the accommodation. To support this thought, CSO (2003), stated that there is high risky of HIV infection among people with low socio-economic status. Such people engage themselves into promiscuous activities to earn a living. Thirty-four percent (34%) live in low density areas, while 32% live in medium density area (Table 3, page 38). According to CSO (2003), people with high socio-economic status, are also at risky of contracting HIV infection due to misuse of their money, in an unacceptable behaviors such as promiscuity and substance abuse.

Majority of the respondents (48%) attained secondary education and 34% attained college education, and 8% never went to school, (Figure 3 page 38). This could be understood that most of the respondents had attained basic education. CSO (2003) shows that most of the people in Zambia have acquired basic education, and this idea concurs with findings of this study.

Concerning occupational status of the respondents, 52% were employed, 24% were unemployed and another 24% were self employed (Table 4, page 39). This result implies that most of the respondents were engaged in one form of employment or another. This is supported by what is obtaining in our Zambian economy today that the informal sector is fast growing due to the effects of Structural Adjustment Programme (CSO, 2003).

Majority of the respondents (42%) were from Pentecostal Church, 32% were from Roman Catholic and 12% from the United Church of Zambia (Table 5 page 39). The results show that all the respondents were Christians. The reason for this result could be the fact that the first missionaries to arrive in Zambia were Christian Missionaries. Hence they influenced the indigenous Zambians to Christianity. This could also be probably related to the Zambian constitution which states that Zambia is a Christian Nation that was declared by the second
Republican President of Zambia, Dr F.J.T Chiluba in 1991 (Christian Council Act, 2005)

Majority (64%) of the respondents were married, 20% were widowed, while 10% were divorced and 6% were single, (Figure 4, page 40). This could be attributed to the fact that HIV infection can affect anyone regardless of marital status.

5.3 DISCUSSION OF VARIABLES

5.3.1 CONTENT OF IEC

Adequate IEC entails that HIV and AIDS patients seeking medical health services at the HAART Clinic are taught on basic information about HIV, the risky behaviors to HIV infection, risks of transmitting infection to other people, identify source of support and provide referral skills of their partners to the health workers (Health Resource and Service Administration, 2004). Section B of the questionnaire (Appendix 1) contained questions that helped the researcher to measure the content of Information, Education and Communication of the respondents.

On the content of IEC, the study revealed that 54% of the respondents had inadequate IEC and 46% had adequate IEC, (Table 12 page 46). Table 6, page 40 shows that 84% of the HIV and AIDS patients stated that they were taught the basic facts about HIV and 16% denied having been taught. This result is in line with Figure 5, page 41, which shows that 72% of respondents stated that they were taught the effects of HIV infection on the immunity, while 28% denied. The reason for this could be that health care workers do not teach HIV and AIDS patients on HIV issues on a continuous basis but probably during the initial contact. This could also be attributed to different factors that affect health education, such as inadequate knowledge on the part of the health care providers, inadequate material to teach on, personality attributes of both the care provider and patient. This agrees with Kidd and Clay (2003) who stated that when the health workers provide comprehensive IEC on HIV to patients, patients
will acquire the knowledge which will help them change their behaviors. This will help patients lead a healthy life.

Responding to age in relation to content of IEC that, the respondents have been taught, the study revealed that the respondents aged 26-35 years (60%) had adequate IEC and those age 36 to 45 (52.4%) also had adequate IEC (Table 21 page, 55). This could be attributed to their commitment to prolong their lives and protect others from contracting the infection. This could also be attributed to the fact that in some people learning and assimilating new things is directly affected by advancement in age (Awlings et al, 1993).

When looking at sex in relation to content of IEC that the respondents were taught, Table 22, page 55 revealed that 68.2% of the female respondents had adequate IEC while 57.1% of male respondents had inadequate IEC. In issues of health, females are seen to be more interested, hence, they learn faster than males. Naturally, females are care givers and always learning how to take care of the sick and themselves.

In looking at content of IEC taught to HIV infected people in relation to residential area, Table 23, Page 56 revealed that 58.8% of those respondents who live in high density areas had adequate IEC, and also those who live in low density areas (52.9%) had adequate IEC. Fifty percent (50%) of those who live in medium density areas and 47.1% of those who live in low density areas had inadequate IEC. This could be attributed to the fact that most of the people who live in high density areas usually have the habits of seeking health services when they are unwell. Therefore, they may encourage each other to come to the hospital to learn more on HIV infection as they may be eager to learn. For those respondents who live in low density areas, they may have realized and appreciated the importance of adherence. Therefore, they valued their health and continued seeking health care services. The reason for respondents living in medium density areas and low density areas with inadequate IEC could be
attributed to their personality attributes and may not be ready to learn because they think that they know it all.

With regard to IEC in relation to occupation, Table 24, page 56, revealed that 83% of those respondents who were unemployed and 57.7% of those who were formally employed had adequate IEC. This could be due to clients not being in a hurry and can spare time to go through long discussion sessions (30 minutes and above) with the health worker to learn more issues on HIV. For those who are employed, they may have disclosed their status to their employers. Therefore, they do not find difficulties to get permission to come to the clinic. They may get encouragements from their employers who may even be paying for employee’s medical expenses. Though this result is contradicting to Table 19 on page 53 which revealed that some patients (4%) were not adhering to the IEC they are given because their employers were very strict on giving them permission to come to the clinic. This result could mean that employees did not disclose their status. The study result is in line with AIDS in Africa (2002) which revealed that failure of patients to comply with IEC on disclosure limited them to access the continued care and follow-up to the hospital.

The study also revealed that 83.3% of those respondents who were self-employed and 42.3% of those respondents who were formally employed had inadequate IEC. The reason for this result could be that those respondents who were self-employed had no one to encourage them to come to the clinic as they may have been very busy with other tasks which they thought were of more priority than their health. The other reason could be that the clients run out of money for a bus fare to come to the clinic, as they are self-employed and may be living in areas which are far away from the clinic. This could be attributed to the raising cost of living as it can be seen from the for-going. This is in line with Ministry of Health (2005) which states that high levels of poverty were contributing directly and indirectly to people being infected with HIV. Such that when one has no stable source of income, they are likely to fail to come to the clinic. The reason for those who were employed but had inadequate IEC could
be attributed to their failure to get permission from their employers (Table 19 on page 53) just because they did not disclose their status for fear of losing their job (AIDS in Africa, 2002). This result could also be attributed to the type of work which some client do. They may be required to travel long distances and when they come to the clinic, they are in a hurry. The health worker might not be able to teach such clients detailed IEC.

When looking at IEC in relation to level of education, Table 25, page 57 shows that 80% of respondents who attained primary education and 75% of those respondents who had never been to school had inadequate IEC. This could probably be that respondents who had no education and those who attained primary education were not able to ask the health care providers and probe further on issues they did not understand when they are being taught. This could have made them not realize the importance of continuing with subsequent reviews to learn more HIV issues. This result could also be attributed to health workers lacking skills in communicating HIV facts to HIV and AIDS patients. The communication process would be interfered and IEC would not be delivered to the client effectively. This is in line with Banda (2007) who stressed that health workers lack competencies in managing HIV and AIDS patients leading to patients not receiving the required information (Human Resource and Service Administration, 2004).

The study also shows that 66.7% of those respondents who attained secondary education and 64.7% of those respondents who attained tertiary education had adequate IEC. This could be attributed to the fact that these clients accepted their status, understood the importance of subsequent visit to the clinic and were always inquisitive and asked the health care providers to teach them more on HIV facts and ideas. This result could also be attributed to the fact those respondents who attained secondary education acquired average knowledge and those who attained tertiary education acquired high knowledge which enables the patient to comprehend and clarify further on issues they did not understand, with the health worker during the learning process.
With regard to IEC in relation to religious affiliation, 100% of a respondent from New Apostolic Church and 56.3% of the respondents from Roman Catholic Church had adequate IEC Table 26, page 58. This could probably mean that, clients from these denominations disclosed their status and the fellow church members encourage them and even supported them financially to access health services. On reaching at the clinic, patients are able to receive and be taught more issues and facts about HIV.

The result also shows that 50% of the respondents from Seventh Day Adventist and 50% of respondents from Reformed Church of Zambia had inadequate IEC. The reason for this result could be that these clients did not disclose their status (AIDS in Africa, 2002) to the significant others. This might have contributed to their failure to continue seeking HAART service and learn more. This is also in line with management of Antiretroviral Therapy (2004), which states that supporting the well being of people living with HIV and AIDS, through the provision of IEC as stipulated in the guidelines, is very important and crucial. This is because it benefits patients in that it reduces the occurrence of HIV-related diseases in people living with HIV and AIDS (PLHA), reduces the burden on the health system and care givers while leading to improvement in the quality of their life and quality of their families.

In looking at IEC in relation to marital status Table 27, page 58, the results show that 80% of those respondents who were divorced and 66.7% of those who were single had adequate IEC. This could mean that that these respondents with adequate IEC were groups which were eager to learn and frequented the clinic in order to prolong their lives. The result could also be probably that single respondents were preparing for marriage and wanted to learn ways of preventing the spread of infection to their fiancés. The result revealed that 50% of the respondents who were married and 40% of the respondents who were widowed had inadequate IEC. This result could be attributed to the personality attributes of the respondents. They may think that they know every thing with their past experience. Therefore, they never cared to seek for further clarifications with the
health workers. The other reason could be that these categories were kept busy to nurse other sick members of the family; hence, they could be missing on the aspect of coming to the clinic to learning more issues from the health care providers.

5.3.2 FREQUENCY OF RECEIVING IEC

The study results on frequency of receiving IEC revealed that 58% of the respondents received IEC at initial visit to the clinic and 42% of the respondents received IEC at every visit to the clinic.

On looking at the frequencies of receiving IEC in relation to age, majority of respondents (100%) who were aged 15 to 25 received IEC once at initial visit, and 50% of respondents who were aged 46 and above received IEC only at initial visit (Table 28, page 59). This result could mean that youths did not understand the importance of continuity with subsequent visit. Therefore, they decided when to come to the hospital or not. Those respondents aged 46 and above, they might have given up with their health and stopped following their review date. This could probably mean that clients thought that they have already seen enough and going to the clinic was a share waste of time. Staying away from the clinic meant that no learning more information. This result could also mean that these respondents were willing to seek health services as per plan. This could probably be that clients are not working and can afford to meet the expenses associated with HIV infection management. Such expenses like fees for Viral Load, Liver Function test and Kidney Function test, for the clients taking ARVs. This in line with MOH (2005) which stated that HIV and AIDS infection is mostly affecting adults in their prime, disrupting and impoverishing families and turning millions of children into orphans.

Concerning frequency of receiving IEC in relation to sex, Table 29, page 59, the result show that 54.3% of the respondents who were females received IEC once at initial visit, while, 46.4% of male respondents receive IEC at every visit to the clinic. This result could be understood that females have a lot of responsibilities.
that hinders them from keeping the appointments, thus, they miss subsequent IEC. The male respondents could have disclosed their status to their wives (Figure 7, page 43) who encouraged and escorted them to the clinic. This improved male respondents' knowledge acquisition on HIV and AIDS issues.

Looking at the frequency of receiving IEC in relation to residential area, Table 30, page 60, 64.7% of the respondents who live in high density areas received IEC once at initial visit, and 56.2% of respondents who lived in medium density areas received IEC once at initial visit to the clinic. This result could be attributed to the respondents' socio-economic status that they may not be able to meet other demands such as transport to the clinic. On the other hand, the result could mean that these respondents have less commitment to participate in improving their health or they did not understand the implications of the initial IEC. This agrees with Manish, Deok and Gupta (2007) which states that most of the patients (64.1%) were getting HIV/AIDS information from friends and relatives from residential areas and the majority of them received wrong information. This scenario can prevent patients from seeking valid information from health workers, thus compromising the content of IEC they receive. It is also in line with AIDS in Africa (1997), which stated that people were seeking HIV testing services because their colleagues talked about testing and the benefits of early treatments. Therefore, patient might merely come to health facility not to learn more information on HIV. This attitude might affect their understanding and IEC comprehension.

The result also shows that 58.8% of the respondents who live in low density area, and 43.8% of those respondents who live in medium residential areas receive IEC at every visit to the clinic. This result shows that these respondents are consistent and have adhered to IEC they are receiving. The other reason could be that clients have accepted their present health status.

With regard to the frequency of receiving IEC in relation to occupation, Table 31, page 60, 61.5% of the respondents who were formally employed and 58% of
those respondents who were self-employed received IEC once at initial visit. This result could mean that, these respondents are occupied with other tasks that have taken priority over their health. Another reason for the formally employed respondents could be that they have not disclosed to their employers their health status. The study result agree with AIDS in Africa (2002) which revealed that failure of patients to comply with IEC on disclosure limited them to access the continued care and follow-up to the hospital. Therefore, it is difficult for them to get permission to be away from work.

The result also revealed that 50% of those respondents who were unemployed and 46.7% of those respondents who were self-employed receive IEC at every visit to the clinic. This finding could be attributed to the fact that, these respondents set priority and they consider their health to be important.

When looking at the frequency of receiving IEC in relation to education level, Table 32, page 61 shows that 80% of the respondents who attained primary education and 75% of the respondents who had no education received IEC once at initial visit to the clinic. This could be attributed to the respondents’ level of education. This is in line with Manish, Deok and Gupta (2007) where majority of the respondents were illiterate and education affected the level of knowledge related to HIV and AIDS. These results also agree with Fundulu (1998) who stated that when an individual is illiterate he/she is powerless to change or influence their position in life.

Respondents (47.1%) who attained tertiary education and 41.7% who attained secondary education receive IEC at every visit to the clinic. Teaching on healthy living is done at every visit depending on patients’ needs and teaching the importance of taking ARVs correctly is done at every visit as the patient is commenced on treatment (Human Resource and Service Administration, 2004). This is also in line with management of Antiretroviral Therapy (2004), which states that supporting the well being of people living with HIV and AIDS, through the provision of IEC as stipulated in the guidelines, is very important and crucial.
This benefits patients in that it reduces the occurrence of HIV-related diseases in people living with HIV and AIDS (PLHA), reduces the burden on the health system and care givers while leading to improvement in the quality their of life and quality of their families. Therefore, this study result reveals that these respondents have seen the benefits of continuing to learn and follow the instructions in IEC.

In considering the frequency of receiving IEC in relation to religious affiliation, Table 33, page 61 the result shows that 100% from New Apostolic Church and 50% of those respondents from United Church of Zambia receive IEC every visit to the clinic. While 71.4% of those respondents who belonged to Pentecostal Churches and 50% from United Church of Zambia received IEC at initial visit to the clinic. The result could probably be that these respondents receiving IEC every visit are getting encouragement from their church members to continue attending the clinic. On the other hand, those who only received IEC at initial visit could not have disclosed their health status to significant others in their church organization, hence, they are not encouraged appropriately. The study result is in line with AIDS in Africa (2002) which revealed that failure of patients to comply with IEC on disclosure limited them to access the continued care and follow-up to the hospital when they are weak and helpless.

Considering the frequency of receiving IEC in relation to marital status, Table 34 page 62, the study show that 66. 7% of respondents who were single and 60% of respondents who were divorced received IEC once at initial visit to the clinic. This result could mean that those respondents who were single could not continue seeking health services for fear of stigma and the married may not have disclosed their status to their spouses.

While 43.7% of respondents who were married and 40% of those respondents who were widowed receive IEC every visit to the clinic. The reason for this result could be that those who were married disclosed their status to their spouses who
encouraged them to continue the subsequent reviews. The widowed could be getting encouragements from past experiences and support from PLWHA.

In describing content of IEC in relation to the frequency of receiving IEC, Table 35 page 62 revealed that 60.8% of respondents who received IEC at every visit to the clinic had inadequate IEC, while 55.5% of those respondents who were received IEC once at initial visit had inadequate IEC. This result could be attributed to the negative attitude of care providers and poor relationship between health care provider and the clients. The result agrees with Banda (2007) who pointed out that health workers tend to relax and are fond of exhibiting apathy behavior towards patient teaching to give the IEC that would help them live normal lives.

In describing content of IEC in relation to the frequency of receiving IEC, Table 35 page 62 revealed that 60.8% of respondents who received IEC once at initial visit to the clinic had in adequate IEC, while 44.4% those respondents who were receiving IEC every visit had adequate IEC. This result could be attributed to the fact that respondents may not be coming to the clinic constantly, thus the day patient went to the clinic would find that topic that, the lesson being taught could have been taught in the previous visit to the clinic and patients learnt same things almost every time.

5.4 IMPLICATIONS OF THE FINDINGS TO THE HEALTH CARE SYSTEM
On the content of IEC, the study revealed that 54% of the respondents had inadequate IEC and 46% had adequate IEC. The study also revealed that 58% of respondents were taught IEC on HIV/AIDS at initial visit to the clinic, while 42% were frequently taught IEC on HIV and AIDS at every visit.

The study results revealed that there are gaps in the content of IEC and the frequency of IEC delivery to HIV patients at the HAART Clinic. These results have implications to the health care system.
The HIV infection is a challenge to the health care system. People living with HIV/AIDS ought to be given the adequate IEC from which they can make informed decisions because they are empowered. The study shows that 54% despite attending clinic had inadequate IEC. The patients echoed that they occasionally receive IEC because they always find 2 nurses or 2 to 3 doctors on duty and there are too many patients given the same appointment. This implies that the co-coordinators of HAART clinic should come up with strategies to evaluate the quality of IEC being given to the patients. This can be done by improving the staffing levels in the clinic, in the face of increasing number of HIV and AIDS patients attending the clinic.

The study further showed that 58% of the respondents were taught IEC at initial visit only. This implies that the clinic lack proper guidelines to guide the delivery of IEC to individual patients. The managers/administrators of this health care service in the HAART Clinic should devise a system of monitoring and evaluating the IEC given to the clients. This could be done through regular checking of clients' records at each visit to know the aspect of IEC already given or not given to the patient.

The study results also imply that the administrators need to consider the competencies of the health providers in the clinic. This can be done through evaluating the health workers to ascertain their level of competence in HIV/AIDS management. With findings of this study, there be need to conduct training for the health workers to move along with the trends of HIV/AIDS. Then in turn they will be able to teach patients appropriate IEC.

Information, education and communication is vital to improving HIV/AIDS clients' quality of life. No research that has been done to evaluate the knowledge that clients acquire from the IEC given to them. Therefore, with this research findings, there is need to ensure that more researches are done to help improve patients' acquisition of IEC.
5.5 CONCLUSION

The purpose of the study was to assess the IEC given to HIV and AIDS patients seeking health services at the medical clinic in UTH. A descriptive study design was used whose study unit comprised of all HIV positive persons and AIDS patients.

The results yield valuable information and it is hoped that the information will be utilized by relevant authority to improve the delivery of IEC to HIV and AIDS patients. The most important significant findings were that there are gaps in the content of IEC and the frequency of IEC delivery to HIV patients at the HAART Clinic. Most of the clients had inadequate IEC and some of them were not frequently given information on HIV issues.

On the content of IEC, a good number of the respondents had inadequate IEC as seen from different responses. This is because a good number of patients stated that they were not taught on some HIV control and prevention measures. The study revealed that respondents were not taught the duration of taking ARVS and they set their own appropriate time. Other areas of the IEC guidelines were not also adequately taught to the clients.

With regard with frequency of receiving IEC, clients usually find 2 nurse and 2 to 3 doctors running the Medical Clinic which caters for other medical conditions, which made it difficult for health care providers to give patients quality IEC. This could mean that some patients could not be taught and some topics could not be discussed as some respondents stated that they were not taught at all in some topics as stated in the guidelines.

It can be therefore mentioned that the main objective of the study has been achieved in that the assessment of IEC given to HIV infected persons and AIDS patients has been determined. Therefore, it can be concluded that content of IEC taught to HIV and AIDS patients could be associated with the frequency of IEC delivery. In view of this, the investigator failed to reject the null hypothesis.
5. 6 RECOMMENDATIONS

5.6.1 University Teaching Hospital
Since the study results revealed that majority of HIV infected persons and AIDS patients require to be taught on HIV issues on regular basis by health workers, there is need for University Teaching Hospital to strengthen its staff to continue disseminating the information.

In order for these patients to acquire HIV information from health care providers in the clinic, management should ensure that health care providers assigned to run the HAART Clinic are trained and acquire the competences for handling HIV and AIDS patients. Health workers should be assessed in HIV/AIDS competences on assigning them to HAART Clinic to ensure that rightful staff is allocated to the clinic to give rightful information to clients effectively and efficiently. This can be done by conducting in house training to promote capacity building among its workers.

5.6.2 Ministry of Health
The Ministry of Health should employ more health workers and deploy and assign a good number to UTH to improve on the human resource. This will allow health care providers find adequate time to teach patients and ensure that the taught information is followed. This move can also improve patient-healthcare relationship.

5.6.3 Health Workers in the HAART Clinic
Since there are few staff to run the clinic and some patients have some difficulties to obtain permission from their places of work, it would work well if the weekend or Saturday Clinic is introduced. This will accord those clients who are working ample time to learn more information on HIV as compared to patients hurrying up to go back for work. Those patients who have not disclosed their status to employers should be encouraged to do so.
5.6.4 Need for further Research
A research should be conducted to evaluate the knowledge that clients acquire from the IEC given to them. This will help improve patients’ acquisition of IEC on HIV/AIDS issues for them to make constructive and appreciated decisions about their own health.

5.7 Dissemination of findings
After data analysis, the researcher wrote a report. The purpose of producing a research report was to communicate the findings to the public. Copies of the research report will be submitted to the Post Basic Nursing Department, University of Zambia Medical Library, Ministry of Health and University Teaching Hospital. The researcher will take advantage of management meetings at the University Teaching Hospital to discuss the research findings. The researcher intends to organize a workshop for nurses at UTH’s In-service Department to discuss the findings of the research. Summaries of research reports will be distributed to nurses through Ward Managers. Therefore, five copies of the report will be printed.

One executive summary will be sent to the other to HAART Clinics in Lusaka Urban Clinics.

5.8 Limitations of the study

- Due to a small sample size, the results could not be generalized to HIV and AIDS patients in Zambia.
- The study could not be done on a larger scale due to limited time and financial resources.
- There are few studies that have been done in Zambia. This made it difficult to make comparisons with other local and to determine the differences or similarities in the finding.
- This research was done in UTH; therefore, the findings of this study can not be generalized country wide.
REFERENCES


APPENDIX I

THE UNIVERSITY OF ZAMBIA

SCHOOL OF MEDICINE

DEPARTMENT OF POST BASIC NURSING

STRUCTURED INTERVIEW SCHEDULE

TOPIC: INFORMATION, EDUCATION AND COMMUNICATION GIVEN TO HIV/AIDS PATIENTS IN THE UNIVERSITY TEACHING HOSPITAL

DATE OF INTERVIEW

PLACE OF INTERVIEW

NAME OF INTERVIEW

SERIAL NUMBER

INSTRUCTIONS TO INTERVIEWER
1. Introduce yourself to the respondent
2. Explain the purpose of the interview
3. Get verbal consent from the respondent
4. Reassure the respondent that all response will be held in strict confidence
5. Individual names and addresses should not appear on the interview schedule
6. Ensure that all questions are answered and indicate response by ticking in the appropriate box (e.g) or filling in the space (s) provided
7. Thank the respondent at the end of each interview
SECTION A: DEMOGRAPHIC DATA, AGE, GENDER AND EDUCATIONAL LEVEL

1. How old are you?
   a) 15-24 yrs ( )
   b) 25-34 ( )
   c) 35-44 ( )
   d) 46 yrs and above ( )

2. Sex
   a) Male ( )
   b) Female ( )

3. Where do you live?
   a) High density area ( )
   b) Medium density area ( )
   c) Low density ( )

4. What is your highest level of education?
   a) Never been to school ( )
   b) Primary ( )
   c) Secondary ( )
   d) Tertiary ( )

5. What is your occupation?
   a) Employed ( )
   b) Unemployed ( )
   c) Self employed ( )

6. What is your religious denomination?
   a) Seventh Day Adventist ( )
   b) United Church of Zambia ( )
   c) New Apostolic Church ( )
   d) Reformed church in Zambia ( )
   e) Roman Catholic Church ( )
   f) Pentecostal churches ( )

7. What is marital status?
   a) Married ( )
   b) Divorced ( )
   c) Single ( )
   d) Widowed ( )

SECTION B: CONTENT OF INFORMATION, EDUCATION
AND COMMUNICATION GIVEN TO HIV AND ADIS PATIENTS IN UTH

8. Were you taught the basic information on HIV disease?
   a) Yes ( )
   b) No ( )

9. If yes, how does the HIV affect the immunity?
   ( )

10. Were you told how to avoid risks of self infection and to prevent
    transmission of infection to others?
    a) Yes ( )
    b) No ( )
11. If yes how can HIV person prevent the spread of HIV infection to the people?
   a) By using a condom during sex (  )
   b) Never to share razor blades or needles (  )
   c) Abstain from sexual relationships (  )
   d) Don’t know (  )

12. Did you ever use a condom during sexual intercourse in the last six months?
   a) Yes (  )
   b) No (  )

13. Were you told the importance of disclosing your HIV status to someone?
   a) Yes (  )
   b) No (  )

14. With who have shared you results with?
   a) Wife (  )
   b) Husband (  )
   c) Relatives (  )
   d) Others, specify (  )

15. What are the benefits of disclosing your HIV status to someone you choose to confide in?
   a) Will give me support and help me when I am weak (  )
   b) Reduce spread of infection (  )
   c) To feel free (  )

16. What type of food stuff are you supposed to take to boost your immunity?
   a) Uncooked food (  )
   b) A balanced diets from locally sourced food stuff (  )
   c) Never taught (  )

17. Are you on ARVs?
   a) yes
   b) No

18. If yes, how long are you supposed to take the treatment?
   a) For a life long (  )
   b) As long as I wish (  )
   c) Don’t know (  )

19. Can ARVs be shared with other people who are HIV positive?
   a) Yes (  )
   b) NO (  )

20. Can ARVs cure the HIV infection?
   a) Yes (  )
   b) No (  )

21. What time do you take you treatment?
   a) Before food (  )
   b) After food (  )
   c) At the time I have set (  )

22. Were you told the importance of health living?
   a) Yes (  )
   b) No (  )
23. If yes, what are the benefits of living a healthy life when you are HIV positive?
   a) Can live longer ( )
   b) Can feel better
   c) I don’t know
24. How do described the IEC you were taught?
   a) Adequate ( )
   b) Inadequate ( )

SECTION C: FREQUENCY OF IEC DELIVERY TO HIV AND AIDS PATIENT
25. Were you told the importance of your subsequent reviews and monitoring of the care given?
   a) Yes ( )
   b) No ( )
26. If yes, have you ever missed an appointment date?
   a) Yes ( )
   b) No ( )
27. If yes, what was the reason for you missing the appointment?
   a) Went out and left the card behind ( )
   b) No reason ( )
   c) Others specify ..................
28. How frequent do you come for review?
   a) Every after one months ( )
   b) Every after two mouths ( )
   c) Every after three months ( )
   d) Every after six month ( )
29. Frequency of teaching on the important of adherence
   a) Every visit ( )
   b) Once at initial visit ( )
30. Frequency of teaching on the HIV basic information and prevention
   a) Every visit ( )
   b) Once at initial visit ( )
31. Frequency of teaching on the importance of disclosure and support
   a) Every visit ( )
   b) Once initial visit ( )
32. Frequency of teaching on the importance of nutrition support in your status
   a) Every visit
   b) Once at initial visit
   c) I have never been taught
33. Frequency of teaching on the what to do when you wish to have children
   a) Every visit ( )
   b) Once at initial visit ( )
   c) I have never be en taught ( )
34 Frequency of teaching on the importance of healthy living
   a) Every visit ( )
   b) Once at initial visit ( )
   c) I have never been taught ( )

35 Frequency of teaching on the importance of taking ARVs correctly
   a) Every visit ( )
   b) Once at initial visit ( )
   c) I have never been taught ( )

SECTION D: FACTORS WHICH INFLUENCE ADHERENCE TO IEC GIVEN

36 What are other factors which make you fail to follow the advice which health worker give?

37 What do you think can be done to improve the services provided in the HAART clinic?

THE END
THANK YOU FOR YOUR PARTICIPATION
### APPENDIX I

#### WORK SCHEDULE

<table>
<thead>
<tr>
<th>TASK TO BE PERFORMED</th>
<th>WEEKS</th>
<th>DATES</th>
<th>PERSONNEL ASSIGNED TO TASK</th>
<th>PERSONAL REQUIRED</th>
<th>DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>Continuous</td>
<td></td>
<td>Principal Investigator</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td>Finalizing research proposal</td>
<td>Week 1–13</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; May to 31&lt;sup&gt;st&lt;/sup&gt; July 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>92</td>
</tr>
<tr>
<td>Clearance from ethics committee</td>
<td>Week 14 – 15</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Aug to 29&lt;sup&gt;th&lt;/sup&gt; Aug. 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Formulation of Data collection tool</td>
<td>Week 12-13</td>
<td>16&lt;sup&gt;th&lt;/sup&gt; to 27&lt;sup&gt;th&lt;/sup&gt; July 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Field testing the research tool</td>
<td>Week 18</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; Aug – 2&lt;sup&gt;nd&lt;/sup&gt; Sept, 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>7</td>
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<tr>
<td>Data collection</td>
<td>Week 13 – 17</td>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Sept. to 30&lt;sup&gt;th&lt;/sup&gt; Sept. 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Data analysis</td>
<td>Week 18 – 22</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Oct. to 10&lt;sup&gt;th&lt;/sup&gt; Nov. 2007</td>
<td>Principal Investigator</td>
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<td>41</td>
</tr>
<tr>
<td>Report writing and submission</td>
<td>Week 23 – 27</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Nov. to 31&lt;sup&gt;st&lt;/sup&gt; Dec. 2007</td>
<td>Principal Investigator</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Dissemination of findings</td>
<td>Week 23 – 27</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Jan – 25&lt;sup&gt;th&lt;/sup&gt; Jan, 2008</td>
<td>Principal Investigator</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>Continuous by the Researcher</td>
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APPENDIX III

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<tr>
<th>RESPONSIBLE PERSON</th>
<th>TASKS TO BE PERFORMED</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Finalizing research proposal</td>
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<tr>
<td></td>
<td>Literature review</td>
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<tr>
<td></td>
<td>Clearance from National/Funding authority</td>
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<td></td>
<td>Pilot study</td>
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<tr>
<td></td>
<td>Data collection</td>
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<td></td>
<td>Data analysis</td>
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<td>Report writing and submission</td>
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<tr>
<td></td>
<td>Dissemination</td>
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<td>Monitoring and evaluation</td>
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<td>Submission of report</td>
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Dec  | Jan  | Feb  |
| Oct  | Sept | Aug  |
| July | June | May  |
APPENDIX IV
BUDGET FOR THE RESEARCH STUDY
BUDGET JUSTIFICATION

Stationery
Research requires stationary. There will be need for a printer and ink for printing out the work, paper for typing, photocopying questionnaires, scientific calculator for analysing data, folders and clips for filing research documents. The pens and pencils will be used for writing while the correction fluid and eraser will be used for correcting any mistakes.

Secretarial Services
The research report will need to be typed professionally, photocopied and bound.

Dissemination workshop
Dissemination of research findings is one of the major requirements of research. The researcher is mandated to disseminate findings to the community where the study was conducted as well as to other interested stakeholders. In this study, dissemination workshops will be held for University Teaching Hills Hospital management where doctors, nurses, clinical officers and some of the research participants will be communicated to about the research findings and the recommendations.

10% contingency of total budget
The 10% contingency is to cater for any rise in the prices during the course of the research.
University of Zambia
School of Medicine
Department of Post Basic Nursing
P.O Box 50110
Lusaka
30\textsuperscript{th} July, 2007

The Executive Director,
University Teaching Hills Hospital,
P.O Box 30043,
Lusaka.

UFS:  The Head of Department
School of Medicine
Department of Post Basic Nursing
P.O Box 50110
Lusaka

Dear sir/madam,

**RE: PERMISSION TO UNDERTAKE PILOTY STUDY**

I am a fourth year (4\textsuperscript{th}) student at the above institution pursuing the Bachelor of Science in Nursing. I am expected to carry out a research study as part of the requirements for the fulfillment of the degree in nursing.

This letter serves to request permission from you to undertake a pilot before conducting the main study at your hospital on the type of information, education and communication given to patient with HIV/AIDS. Data collection will commence in September 2007.

Your assistance will be greatly appreciated

Yours faithfully

Hamwiibu Vine
University of Zambia  
School of Medicine  
Department of Post Basic Nursing  
P.O Box 50110  
Lusaka  

30th July, 2007

The Executive Director,  
University Teaching Hills Hospital,  
P.O Box 30043,  
Lusaka.

UFS: The Head of Department  
School of Medicine  
Department of Post Basic Nursing  
P.O Box 50110  
Lusaka  

Dear sir/madam,

RE: PERMISSION TO UNDERTAKE RESEARCH STUDY

I am a fourth year (4th) student at the above institution pursuing the Bachelor of Science in Nursing. I am expected to carry out a research study as part of the requirements for the fulfillment of the degree in nursing.

This letter serves to request permission from you to undertake a study at your hospital on the type of information, education and communication given to patient with HIV/AIDS. Data collection will commence in September 2007.

Your assistance will be greatly appreciated

Yours faithfully

Hamwiibu Vine
30th July, 2007

The Executive Director of Health
University Teaching Hospital
P. O. Box 50001
LUSAKA

UFS: The Head - Department of Post Basic Nursing.

Dear Sir / Madam,

RE: PERMISSION TO CONDUCT A RESEARCH STUDY

I am a fourth (4th) year student pursuing a degree programme in Nursing at the above mentioned school. As part of the course requirements I have to undertake the research project. It is in this premise that I write to seek permission to undertake the study at University Teaching Hospital. The title of the study is “Information, Education and Communication given to HIV and AIDS patient”. The study will be done at University Teaching Hospital in the Medical Clinic. I intend to do my study in the month of September, 2007.

It is my hope that the findings will help in strengthening the HIV and AIDS prevention and control programme at the hospital. The findings are further hoped to improve the health care service delivery to HIV and AIDS patients towards promotion of healthy living among HIV infected people and mitigating the impact of HIV pandemic.

Thanking you in anticipation for your assistance, cooperation and consideration.

Yours faithfully,

Hamwiliyu Vine, Student PBN.

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