# THE UNIVERSITY OF ZAMBIA SCHOOL OF MEDICINE DEPARTMENT OF NURSING SCIENCES

# SEXUAL BEHAVIOUR OF PEOPLE ON HAART AT CHIKANKATA MISSION HOSPITAL IN MAZABUKA DISTRICT

BY:

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### LIST OF ABBREVIATION

AIDS - Acquired Immunodeficiency Syndrome

ART - Antiretroviral Treatment

CMH - Chikankata Mission Hospital

CSO - Central Statistical Office

FHI - Family Health International

GRZ - Government of the Republic Zambia

HAART - Highly Active Antiretroviral Therapy

HIV - Human Immunodeficiency Virus

IEC - Information Education and Communication

MCP - Multiple and Concurrent Sexual Partners

MoH - Ministry of Health

NAC - National AIDS Council

PLHIV - People Living with HIV

STI - Sexual Transmitted Infection

UNAIDS - United Nation AIDS

WHO - World Health Organisation

ZDHS - Zambia Health Demographic Survey

ZSBS - Zambia Sexual Behaviour Survey

P.A - Pentecostal Assemblies

U.C.Z - United Church of Zambia

R.C - Roman Catholic Church

S.D.A - Seventh Day Adventist

N.A.C - New Apostolic Church

J.W - Jehovah's Witness

### **DECLARATION**

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

Sign S Chinhng ??

Approved by...

(Supervisor) 2011

NOTENT OF NURSING

BOX DELOS LUSAKA

Date 1st June 2011

Date. 1/06/2011

### **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.

Sign S. Chunhagy"

Date 1 June 2011

(Candidate)

### DEDICATION

This research is dedicated to my wife Mercy and my sons Mapalo and Lushomo who missed my company and love. To my dad and mum and my mother in-law, I also dedicate this research to Mr. G.C. and Mrs. B.N. Musamba, who have being very instrumental in my life and studies and always wanted to see the best of me and never look back.

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### **ABSTRACT**

Chikankata Mission Hospital found in Mazabuka District houses the ART clinic popularly known as MukaBumi Clinic was conveniently selected. PLHIV on HAART are reviewed from the ART clinic on a daily basis. The ART clinic has over 1,700 clients on HAART

The main objective of the study was to determine sexual behaviour of People HAART both male and female aged 18 and above years at Chikankata Mission Hospital

The study design was both a descriptive quantitative study design and qualitative study design used to gain information on sexual behaviour and its associated factors. The study hypotheses were (a) Knowledge on safer sex practices leads to a satisfactory sexual behaviour among PLHIV on HAART, (b) Knowledge will result in positive attitude toward safer sex practices among PLHIV on HAART, and (c) Positive attitude results into satisfactory sexual behaviour among PLHIV on HAART.

The sample was 50 PLHIV receiving health care services at Chikankata Mission Hospital ART clinic, the study site was conveniently selected while simple random sampling was used in selecting the sample. The study was conducted in October 2010.

Ninety eight percent of the respondents had high knowledge while, (2%) had low knowledge on safer sex practices with an average of mean 4.8. Qualitative analysis of attitude toward safer sex practice was showed positive sexual behaviour, however, quantitative analysis showed negative attitudes of (78%) while, (22%) of the respondents had positive attitudes toward safer sex practices with an average mean of 0.24. Majority of the respondents (74%) had satisfactory behaviour while, (26%) had unsatisfactory sexual behaviour with an average mean of 5.3. On cross tabulation (78%) of respondents with high knowledge had negative attitude toward safer sex practices while, (22%) of respondents with low knowledge had negative attitude toward these practices, further (22%) of the respondents with positive attitude had satisfactory sexual behaviour while, (73%) with negative attitude had unsatisfactory sexual behaviour. Finally 100% of the respondents with high knowledge had satisfactory sexual behaviour and 8% of the respondents with low knowledge had unsatisfactory sexual behaviour.

In order to promote satisfactory sexual behaviour among PLHIV the following need to be done (a) empowerment of the women in form of quality education (b) promote condom use among PLHIV especially female condoms (c) special training in IEC provision and have a one to one IEC session with PLHIV (d) members of the community need to be given equal chances to participate in health care programmes (d) VCT services need be fully rolled out to community and household level (e) economic empowerment of PLHIV especially female PLHIV and (f) there is need to develop a National Policy on Safer Sex Practices that will serve as guide to health care providers in the provision of quality IEC to PLHIV and the general public.

### **CHAPTER ONE**

### 1.0 INTRODUCTION

### 1.1 Background

Human Immunodeficiency Virus, was discovered in the early 1980s by epidemiologists who recognized the sudden increase in some conditions such as Kaposis Sarcoma, which is a rare cancer and pneumocystic carinii pneumonia(Pneumocystis jirovecii pneumonia) which is a form of pneumonia that occurs only in people with compromised immune system (Berkow, 1997).

A World Health Organisation-United Nations Program on AIDS (WHO-UNAIDS) reported, an adult HIV prevalence of 33 million people (15-49years) world wide with the following percentages across the globe in 2007.

- Southern Africa- (15%)-(28%)
- Eastern and parts of west Africa- (5%)-(15%)
- Some parts of Africa and Eastern Africa- (1%)- (<5%)
- South America, some parts of Africa and the USA- (0.5%)- (<1%)
- North America and Europe- (0.1%) (<0.5)
- Arab world-(< 0.1%) (UNAIDS, 2008)

In Sub-Saharan Africa a total of 22.4 million people are living with HIV which is about two thirds of the world's population, and 1.9 million people were reported to have become infected by 2008. In Southern Africa the HIV prevalence is reported to be (15-28%). Zimbabwe's HIV prevalence rate ranges from (15-20%), Botswana (23.9%), Lesotho (23.4%) and Swaziland (26.1%) (UNAIDS 2008).

The first case of Human Immunodeficiency Virus (HIV) in Zambia was reported in 1984 (MoH and NAC, 2010), and the number of People Living with HIV (PLHIV) was on the increase, reaching its peak in the mid 1990's with a prevalence rate of (16%) (MoH and NAC, 2010). It is reported that PLHIV distribution is through out the country and the most affected are people in the age range of 15-49 years (GRZ, 2009).

Currently Zambia's HIV prevalence stands at 14% in the adult population aged 15-49 (GRZ, 2009), and heterogeneity HIV prevalence in females and males is (16%) and (12%) respectively in ages 15-49 while, in women above 40 years it is significantly lower (GRZ 2009). The estimated number of People Living with HIV (PLHIV) in Zambia is approximately close to 1 million, and the distribution varies from Province to Province between (3%) in North-Western Province to 20% in Lusaka Province. In Southern Province PLHIV is estimated to be 12.8(%) and Chikankata currently has 1, 580 adult PLHIV on Highly Active Anti-Retroviral Therapy (HAART), (NAC, 2009; CSO, 2009 and CMH, 2010).

PLHIV are put on HAART with the aims of improving the quality of life, reduce HIV/AIDS related mortalities, reduce HIV transmission, reduce the viral load and boost their immune status (MoH, 2004). Treatment with HAART is coupled with Health Education messages addressing compliance with treatment, and sexual behaviour change among PLHIV (MoH, 2005). Antiretroviral therapy (ART) coverage was estimated to be at (60%) by 2011. In 2008 a total number of 219, 576 (66%) PLHIV were on ART (CSO, 2007 in GRZ, 2009: 151).

Sexual behaviour change among PLHIV is a process that begins from the time one has undergone counselling and testing. This change may be influenced by many factors such as age, education level, and knowledge on HIV transmission, its prevention and practising of safer sex. Other factors include quality of health care received from health care providers that is quality of Information, Education and Communication (IEC) and socio-economic factors. HIV transmission is more likely to occur by having unprotected sex with an infected person; this is either through heterosexual relationships or other forms of sexual contact such as Men having Sex with Men (MSM) but, the commonest way of spreading HIV in Zambia is through heterosexual relationships. In a Corridor of Hope (2008) publication, six core drivers to HIV transmission were highlighted, these been Multiple and Concurrent Sexual Partners, not using condoms, low HIV testing, alcohol and drug abuse, low circumcision levels and vulnerability of women associated with Gender Based Violence (GBV).

The focus of HIV transmission prevention is based on strategic objective of behaviour change communication, which include sexual abstinence, being faithful (in marital or stable

unions and also implies partner reduction in men and women with multiple sexual partners) and condom use (to prevent transmission and contracting of HIV/STIs etc), and this is the same message passed on to PLHIV whilst on HAART as reflected in the MoH, CSO and ORC Macro (2005) report, on the Zambia HIV/AIDS Services Provision Assessment Survey.

Despite all the efforts noted above there is low condom use generally in Zambia, this is according to a report on Zambia Sexual Behaviour Survey (CSO, 2003). There report covers sexual behaviour in both PLHIV and people not living with HIV. Corridor of Hope (2008), noted gaps in knowledge and sexual behaviour practices, and these again were general observations made in reference to the general Zambian population. Collins (2008) reported that in Zambia there is a (10%) HIV reinfection rate in couples with subtype C of the HIV strain, therefore, the subject of sexual behaviour in PLHIV is important as this will help us knowing how the PLHIV have adapted to the new life of living (positive sero-status) positively, and what sort of measures the PLHIV have put in place, to protect them from contracting new strains of HIV and other STIs and protecting others from contracting HIV. Therefore, this study is designed to focus on the sexual behaviour of PLHIV, as this will help in identifying lapses in safer sex practices and strengthen Health Education messages provided to the clients on behaviour change.

### 1.2 STATEMENT OF THE PROBLEM

Sexual behavioural and safer sex messages have been scaled up at all ART centres, the print and electronic media are equally highly involved in the dissemination of such messages. Adherence counseling is provided to all PLHIV clients at both individual and group level by trained health personnel and volunteers. Condoms are provided to PLHIV during every clinic session, thus improving accessibility to condoms, coupled to this are demonstrations on effective use of condoms to reduce the risks of transmitting HIV infection, messages on abstinence and having one sexual partner are highly emphasised. Despite these efforts and the knowledge that PLHIV may have on HIV, its transmission and prevention has not led to satisfactory sexual behaviour change and adoption of safer sex practices to overcome the spread of the HIV among PLHIVs.

According to statistics, Zambia's HIV prevalence rate is at (14%) and the estimations of trends in HIV incidence in the adult Zambian population of 15-49 years of age was (1.6%) in 2009, that is (2%) in women and (1.2%) in men giving a total of an estimated 82, 681 adults infected with HIV in 2009, this translated into (59%) women and (41%) men infected over this period and eventually this culminated into 226 new adults infected every day (NAC, 2009). This picture may be a reflection of not complying with safer sex practices among PLHIV. It is observed that couples of PLHIV have a reinfection rate of (10%) with subtype C of the HIV (Collins, 2008) in Zambia. Informal discussions with ART clinic staff in Chikankata, indicated that a number of Sexually Transmitted Infections (growths / warts) have been noted among PLHIV and treated though they had improper records. There is a strong relationship between STI infections and HIV infection, as chances of being HIV positive are increased in the presence of STIs and there is a high risk of HIV transmission in the presence of STIs, Phipps et al (2009) reports increased cases of STIs among HIV infected people (1.2% syphilis, 10.2% Chlamydia and 88% Gonorrhoea), which indicates that there are serious lapses in observing safer sex practices and that sexual behaviour change has not yet fully taken place in PLHIV.

Safer sex practices among PLHIV are important to prevent the further transmission of the infection to the uninfected population, and prevent contracting of STIs and new viral strains among PLHIV which may be resistant to HAART. Hamwiibu (2008), reports that (57.1%) of males and (32.8%) of women living with HIV and on HAART showed inadequate knowledge on safer sex related information and practices, as sexual behaviour change is tied up to the quality of knowledge possessed by the PLHIV, in this case awareness of safer sex practices and any lapses may result in not complying with safer sex practices and indulgence in risky behaviours such as having unprotected sex.

Considering the facts above it is clear that sexual behaviour change is paramount in PLHIV to mitigate HIV reinfection and STI infections among PLHIV and prevent the further spread of the infection. This study is, therefore, designed and aims to determine sexual behaviour among PLHIV whilst on HAART.

### 1.3 Factors Influencing Sexual Behaviour

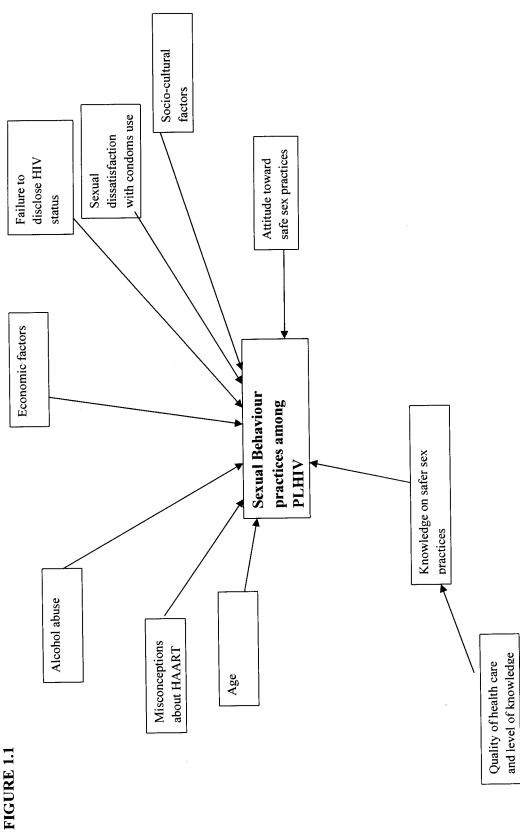
There are various factors that may influence sexual behaviour of PLHIV on HAART.

### 1.3.1 Description of the Contributing Factors

- 1.3.1.0 Knowledge- knowledge on practice of safer sex, abstinence and faithfulness, and benefits may be key in making the individual adopt changes in sexual behaviour. The higher the knowledge on safer sex practices, the higher the chances that the individual may select a method that is best for them and use the it to prevent spread and contracting of HIV/STIs. HIV positive clients who discuss there sexual behaviour with health care providers and receive counsel on safer sex practices, acknowledge the discussions were helpful in adopting safer sex practices and hence, may elicit a positive sexual behaviour change. This is supported by Patel et al (2006) who reported that (91%) of PLHIV clients who had discussions on safer sex practices were helpful in assuming positive sexual behaviours.
- **1.3.1.1 Age of the client-** the age of the PLHIV may play a vital role in sexual behaviour change. The younger the PLHIV, the more likely they may engage in risky sexual behaviour as they are still energetic and experimenting on life while, the older PLHIV may be less energetic, mature and settled in life.
- **1.3.1.2 Socio-cultural issues** these may play a role in adopting safer sex practices. The need to have a child may be seen as important in several cultures, Chakrapani et al (2007) reports that, in the Indian culture having a male child is prestigious and in the same report it was revealed that seroconcordant couples did not practice safer sex methods on this basis.
- 1.3.1.3 Economic factors- most of the PLHIV may fail to observe safer sex practices due to the poor economic status they may be found in. They may fail to negotiate for safer sex practices so as to earn a living. This is more likely among women who may depend on their husbands or other sexual partners from whom they may be obtaining their income to survive, and this may expose them to contracting new HIV strains and STIs.
- **1.3.1.4 Alcohol abuse** the use of alcohol among PLHIV may have devastating consequences on their sexual behaviour. Alcohol causes judgment impairment and may lead to not observing safer sex methods and involvement in risky sexual behaviours.

- 1.3.1.5 **Misconception about HAART-** the fact that PLHIV are on HAART may lead to a belief that they are no longer HIV positive. This may increase the risk of them indulging in risky sexual behaviours resulting and lead to further HIV spread.
- **1.3.1.5 Sexual dissatisfaction with condoms use-** the notion that sex with a condom is dissatisfying may be a contributing factor to risky sexual behaviour and increases the chances of PLHIV to contracting new HIV strains and STIs.
- 1.3.1.6 Attitude- a positive attitude toward safer sex practices may be a positive indicator, that the person is willing to change and prevent the contracting and transmission of STIs and HIV. The attitude that when condoms are used did not give sexual pleasure was reported by Patel et al (2006), and this was the reason why safer sex practices were not observed whilst, others had the belief that being a seroconcordant couple did not require safe sex practices. This kind of scenario among PLHIV may facilitate negative attitudes toward safer sex practices hence, no change in sexual behaviour among PLHIV.
- 1.3.1.7 Failure to disclose HIV status- failure by the PLHIV to disclose their HIV status to their sexual partner (s) for fear of disharmony and suspicion of infidelity may be a contributing factor as to why sexual behaviour change and use of safer sex practices may be problem among PLHIV. The PLHIV may feel comfortable to hide their status for the sake of maintaining peace and trust in their relationships.

# 1.3.2 DIAGRAM OF FACTORS THAT MAY INFLUENCE SEXUAL BEHAVIOUR AMONG PLHIV IN CHIKANKATA



### 1.4 Justification

Safer sex practices are important in the prevention of transmission and contracting of HIV/STIs among PLHIV, without this the quality of life though improved by being on HAART may quickly worsen, due to contracting new strains of HIV which may be resistant to HAART and require more expensive drugs thereby placing a huge burden on the already mega resources.

Currently Sexual Behaviour Surveys undertaken outside Zambia have focused on sexual behaviour among PLHIV and these studies have been used to improve the health care package for PLHIV which is holistic. Zambia Sexual Behaviour Surveys have been done on a general basis and not focusing on the sexual behaviour of PLHIV, this does not provide sufficient information to note the strengths and weaknesses in our health care package as it relates to PLHIV.

It is important therefore, to carry out a study to determine the sexual behaviour of PLHIV whilst on HAART. This study will bring out results of any change in sexual behaviour based on the use of safer sex practices. The results of this study can be applied to the reinforcing of the Health Care Package, focused on incorporating safer sex messages for PLHIV as they attend ART clinic counseling sessions.

### 1.5 Research Objectives

**1.5.1 General Objective:** To determine sexual behaviour of People Living with HIV on HAART both male and female aged 18 years and above at Chikankata Mission Hospital.

### 1.5.2 Specific Objectives

- 1. To find out the knowledge on safer sex practices among PLHIV on HAART at Chikankata Mission Hospital.
- 2. To establish the attitude of PLHIV on HAART towards safer sex practices at Chikankata Mission Hospital.
- 3. To determine the sexual behaviour of PLHIV on HAART at Chikankata Mission Hospital.

### 1.6 Hypothesis

- 1. Knowledge on safer sex practices leads to a satisfactory sexual behaviour among PLHIV on HAART.
- 2. Knowledge will result in positive attitude toward safer sex practices among PLHIV on HAART.
- 3. Positive attitude results into satisfactory sexual behaviour among PLHIV on HAART.

### 1.7 Conceptual Definition of Terms

- 1. Knowledge- the state of been aware about a particular fact or situation (Hornby, 2006.)
- 2. Attitude- the way a person behaves towards something that shows how they think and feel (Hornby, 2006).
- 3. Behaviour- the way a person functions in a particular situation (Hornby, 2006).

### 1.8 Variables and Cut-off Points

Variable are qualities, properties, or characteristics of persons, things, or situations that change or vary and are manipulated, measured or controlled in research (Grove and Burns, 2009). The variables identified in this study are knowledge on safe sex practices, attitudes toward safe sex practices and sexual behaviour of PLHIV on HAART.

# 1.10.1 Independent Variable

Grove and Burns (2009) define independent variables as treatment, interventions or experimental activity that is manipulated or varied by the researcher to create an effect on the dependent variable. Independent variables in this study are:

- (a) Knowledge of safer sex practices, and
- (b) Attitude towards safer sex practices.

## 1.10.2 Dependent Variable

According Grove and Burns (2009) a dependent variable is a response, behaviour or outcome that is predicted and measured in research, changes in dependent variables are presumed to be caused by the independent variable. The dependent variable in this study is sexual behaviour.

### 1.9.3 Variables Indicators and Cut-off Points

Table 1.1: Variables and cut-off points

NO	VARIABLE	INDICATOR	CUT-OFF POINT
	<u>Dependent</u>		
1	Sexual Behaviour	Satisfactory	5-8 points: respondents whose answers denote change in sexual behaviour.
		Unsatisfactory	0-4 points: respondents whose answers denote no change in sexual behaviour.
	Independent		
2	Knowledge on safer sex practice	High	4-5 points: respondent has good knowledge on safe sex practices.
		Low	0-3 points: respondent has poor knowledge on safe sex practices.

3	Attitude toward safer sex practices	Positive	1-	Respondent
				who use
				condoms
		Negative	0-	Respondents
				who do not use
				condom

### **CHAPTER TWO**

### 2.0 LITERATURE REVIEW

### 2.1 Introduction

Literature review is an analysis and synthesis of research sources to generate a picture of what is known and not known about a particular situation or research problem (Grove and Burns, 2009). Literature review also gives the researcher clues to the methodology, and to select the right tools/instrument to use to collect data and it also assists the researcher to refine parts of the study. The purpose of this literature review is to determine what is already known, about the topic Sexual Behaviour of PLHIV on HAART and to give a comprehensive picture concerning knowledge on safer sex practices, attitude toward use of safer sex practices and sexual behaviour of PLHIV.

### 2.2 Knowledge on safer sex practices

HIV-related knowledge and behaviours are important in HIV prevention and control. Knowledge of HIV transmission enables people to protect themselves from infection. Knowledge is an important condition for reinforcing risk reduction behaviours, such as abstinence, avoiding nonspousal sex, and condom use during sex (Hong and Chhea, 2005).

The need for PLHIV to have knowledge on safer sex practices is central to protect themselves from acquiring new infections such as STIs and new viral strains. Several countries around the world have developed and implemented programmes through National HIV programmes, focusing on health massages covering sexual behaviour change and use of safer sex practices, scaling up on patient counseling and the provision of HAART to PLHIV. It is reported that acquisition of knowledge on safer sex practices to prevent the spread of HIV to uninfected sexual partners was seen among PLHIV, "after knowing their HIV status, many persons living with HIV in developed countries adopt safer sex practices to avoid HIV transmission to their sexual partners, although up to one in three PLHIV continue to practice unprotected sex, often with partners of unknown or HIV-negative serostatus" (Chakrapani et al, 2007:15). In another study done in Cambodia, knowledge indicators on prevention methods of having only one sex partner and always using condoms when having sex to prevent HIV infection among sexually

experienced women aged 15–49, were examined and the findings showed improvements in several HIV-related risk behaviours and knowledge among Cambodian women since 2000 had improved (Hong and Chhea, 2005). These findings show that sexual behaviour change is practical among PLHIV and only require constant reinforcement through Information, Education and Communication (IEC).

On the regional front, the HIV epidemic has had great impact with a total two thirds of PLHIV living in Sub-Saharan Africa (UNIAIDS, 2008). Efforts to control the epidemic have been implemented with some amount of change. A study conducted in Abidjan, Ivory Coast by AIDS in Africa (2002) revealed that, patient awareness was done through IEC to bring about behaviour change; the same study also showed that PLHIV were not complying with health massages leading to new STI infections and this was attributed to personal attributes and peer pressure. In a collaborative study carried out by Miz Gosab Research Centre in Ethiopia, Muhimbili University College of Health Sciences in Tanzania and Zambart Project in Zambia revealed that IEC was focused on change in behaviour among PLHIV and this acquisition of knowledge was a continuous process for PLHIV to learn new ideas (Kidd and Clay, 2003). Despite the focus on knowledge acquisition, studies to assess the level of knowledge that PLHIV have revealed low knowledge levels in adopting safe sex practices as an indicator of sexual behaviour change (Hamwiibu, 2008) unpublished. Corridor of Hope (2008) reports, noted disparities between knowledge levels and safer sex practices, 3 out of 4 women were reported not to use condoms and these findings were in agreement with CSO (2003) Zambia Sexual Behaviour Survey (ZSBS) report which, showed low condom use of (8.9%) and (6.7%) among urban and rural women respectively, the CSO (2009) ZSBS also showed low condom use generally in the Zambian population with a slight increase in non-regular partners of (42%) and (35%) for males and females respectively and that condom use was more prevalent in urban (54%) than in rural (28%) areas, the same report equally revealed low condom use among youths and high risk sex of (36%), though this was less by (2%) as compared to the ZSBS report of 2007. The low use of safer sex practices may be a driving force in the spread of HIV and STIs generally in the Zambian population including PLHIV.

According to Corridor of Hope (2008), (85%) of women and men knew that abstinence would reduce the risk of contracting HIV but, sexual behaviour assessments showed that two percent and (20%) of women and men respectively had sex with two or more sexual partners in a study period of 12 months. These finding correlate with a study done in India were PLHIV had sexual relations with non-regular sexual partners hence, suggesting little change in sexual behaviour patterns (Chakrapani et al, 2007).

Knowledge on safer sex practices is cardinal in mitigating the effects of HIV, the studies above have shown that once people become aware they have HIV, they reduce risky behaviours and this only takes place with continuous IEC coupled with regular contacts with the health care providers as major facilitators in sexual behaviour change among those receiving ART.

# 2.3 Attitude toward safer sex practices

The use of safer sex methods is hampered by attitudes that are mainly derived from sexual dissatisfaction when using condoms, a seropositive state, a feeling of guilt and thus hiding the seropositive results from sexual partners for fear of disharmony in the home and relationships. Socio-cultural factors also put pressure on PLHIV, as society demands to see a child in the home. This ultimately leads to PLHIV adopting negative attitudes toward the use of safer sex practices such as condoms and failure to negotiate for safer sex practices. Chakrapani et al (2007), in a study on Prevalence and Contexts of Inconsistent condom use among PLHIV, highlighted some of these accessions and showed that about one third (30.9%) of men and one quarter (26.5%) of women reported inconsistent condom use for vaginal sex.

Related to negative attitudes CSO (2003), reports a low condom use of (55.2%) among men and (49.0%) among women, this is attributed to low accessibility of condoms. The low accessibility to condoms is a reflection of a negative attitude toward use of safer sex practices. The same report reveals that only (61.1%) of men and (49.2%) of women would insist on using condoms during sexual intercourse, out of these percentages only (49%) of males and (36.1%) of women in the rural population would insist on condom use during sexual intercourse, though these findings are based on the general Zambian population which includes PLHIV.

### 2.4 Sexual Behaviour

The prevalence of unsafe sex in HIV-positive persons has called attention to the need for behavioral interventions for this population. Integrated findings showed that behavioural interventions conducted in various settings, and using different approaches to behaviour change are efficacious in reducing the prevalence of self-reported risky sex and prevalence of Sexually Transmitted Infections (STIs) among HIV positive persons. The introduction of ARVs has also been perceived to be a risk factor in the spread of HIV (Hong and Chhea, 2005).

In a study conducted by Gardner et al (2008) it was indicated that, there was an improvement in sexual behaviour indicators among PLIHV as they had reduced their sexual risk behaviours after they learnt of their seropositive status. Nevertheless, some were still engaged in sexual behaviours that would transmit HIV to others. The prevalence of unprotected vaginal intercourse and other sexual forms in a 3-month period among HIV-positive heterosexual women and heterosexual men, sampled at multiple venues in the United States, ranged from (13%) to (19%) with HIV-negative or unknown serostatus partners and (19%) to (30%) with HIV-positive partners, another study conducted in India also revealed that men contracted HIV through multiple sexual relations, while on the other hand the majority of women acquired HIV from their husbands Chakrapani et al, (2007), these findings are indicators of lapses in sexual behaviour change.

A qualitative study on sexual behaviour among PLHIV in Chennai indicated adoption of less risky behaviors following HIV diagnosis, and identified facilitators and barriers to condom use such as not getting full satisfaction, non availability of condoms, seropositive state of both husband and wife however, the same study noted consistent condom use among PLHIV couples attributing this to personal responsibility such as not wanting to infect the spouse with new HIV strains, improving effectiveness of ART treatment as well as an effective family planning method. In the same study it is documented that high-risk sexual behavior was present among HIV-positive injection drug users and prisoners, as both of these groups faced particular challenges to consistent condom use related to trading sex for drugs and lack of condom availability although, generally PLHIV on antiretroviral treatment (ART) in India reported a high level of condom use (Chakrapani et al, 2007).

PLHIV have recorded presence of STIs and this signifies inconsistencies in safer sex practices and lack of change in sexual behaviour, this is supported by a study done by Seña et al (2008), in which a total of 7011 men were newly diagnosed with HIV. Twenty one percent were aged between 18-30 years of which (7.6%) had any stage of syphilis and after exclusion of those who had late syphilis and syphilis of unknown duration, (6.2%) young men had early syphilis. In the same study there were 2142 estimated newly HIV diagnosed women (18-30 years), and (2.4%) had both HIV and syphilis though (1.1%) were coinfected with HIV and early syphilis. The presence of concurrent or overlapping sexual partnerships in this population was assumed to contribute to the persistence of syphilis transmission within the sexual networks of persons already infected with HIV. Condom promotion was mentioned to be a possible means to prevent early syphilis resurgence among HIV-infected men.

The findings above were in agreement with a NAC (2009) report, in which among the drivers of the HIV epidemic are Multiple and Concurrent Sexual Partners, and low and inconsistent condom use is documented and also reveals evidence that suggests that new HIV infections occur during casual and concurrent multiple sexual relations, the nature of HIV transmission is heterogeneity sexual relations between HIV positive and HIV negative individuals, the above information is inclusive of the sexual behaviour of PLHIV and these findings tie up with informal discussions conducted with Chikankata ART Clinic staff who revealed that it was difficult to predict sexual behaviour change among PLHIV, despite the clinic distributing about 205, 000 condoms in the second quarter of 2010 and providing of IEC on behaviour change such as doing away with Multiple and Concurrent Sexual Partners. The staffs have noticed high numbers of pregnancies among PLHIV and some cases of STIs which were all attributed to not complying with safer sex practices and engagement in high risk sexual behaviours.

The roll-out of Anti-Retroviral Treatment (ART) raises concerns about the potential for unprotected sex if sexual activity increases with well-being, resulting in continued HIV spread. Beliefs about reduced risk for HIV transmission with ART may also influence behaviour. In a study conducted between September 2003 to November 2004, 234 adults enrolled in a trial assessing the Efficacy of Modified Directly Observed Therapy in Improving Adherence to ART,

unsafe sexual behavior before starting ART and 12 months thereafter was compared. Nearly half (107/225) were sexually active in the 12 months prior to ART, the majority (96/107) reporting one sexual partner. Unsafe sex was reported by half of those sexually active in the 12 months before ART (54/107) while, after 12 months of ART, this reduced to (28%) (30/107). Beliefs about ART's effect on transmission, viral load, and adherence appeared not to influence sexual behavior but, require long-term surveillance. Positive prevention interventions for those receiving ART must aim at reinforcing safer sex practices and partner disclosure (Luchters et al, 2004). Concerns about the potential impact of ART on sexual behavior are supported by findings of several studies in high income countries showing increases in risky behaviors. However, a meta-analysis of 25 studies among HIV-infected people showed that receiving ART was not associated with higher prevalence of unprotected sex. The analysis, however, did demonstrate higher levels of unprotected sex among those who believed that receiving ART or having an undetectable viral load protects against HIV transmission. Similarly, unsafe sex was higher among those who believed HIV is a less severe or threatening disease due to the availability of ART (Luchters et al, 2004).

Unsafe sex was more likely among participants who had not disclosed their HIV status to their partner (s). In particular, nondisclosure of HIV status to a regular partner/spouse and high levels of perceived stigma were strongly associated with unsafe sex (Luchters et al, 2004), whilst in another cohort study in rural Uganda found that partner VCT, prevention counseling, and condom provision together with home-based ART reduced risky sexual behavior by (70%). The reduction in risk observed among ART patients was not be solely attributable to ART, but rather to more frequent encounters with health workers and improvements in counseling, condom provision, and other services associated with ART introduction.

A lot of studies have been done on HIV and AIDS management in general and there has been a lot of studies done on sexual behaviour on the Zambian population but, no specific study has been done to ascertain the sexual behaviour of PLHIV on HAART. Zambia Sexual Behaviour Surveys (ZSBS), though showing the general sexual behaviour across the country they provide information which covers PLHIV and the sexual behavioral trends that have occurred since the

HIV epidemic was first reported and indicate what interventions and programmes have been put in place to mitigate the effects of the epidemic and control the spread of the infection.

From the above discussion, information generally on sexual behaviour of PLHIV is inadequate to establish changes in sexual behaviour. Though efforts at global and regional levels show some decrease in risk behaviours, there are reports of STIs which are indicators of inconsistent use of safer sex practices and failure to change as it relates to sexual behaviour among PLHIV.

Knowledge on safer sex practices is key to developing positive attitudes toward use of safer sex practices, and ultimately sexual behaviour will be influenced by knowledge and attitudes of PLHIV for successful mitigation of HIV transmission. This study will therefore, contribute to developing and strengthening the health Information, Education and Communication package that will place greater emphasis on sexual behaviour change.

#### CHAPTER 3

#### 3.0 RESEARCH METHODOLOGY

### 3.1 Research Design

In this study, both quantitative and qualitative methods were used. A quantitative design is a formal, objective, systematic study process to describe and test relationships and to examine cause and effect interactions among variables (Grove and Burns, 2009). The quantitative study design was used to describe the study variables that are quantifiable such as demographic information. The study design was selected because it was going to help in determining relationships or influences of background variables and knowledge on safer sex practices on sexual behaviour.

A qualitative study design is defined as a systematic, interactive, subjective approach used to describe life experiences and give them meaning (Grove and Burns, 2009). A qualitative design was used to gain in depth information on sexual behaviour and its associated factors including knowledge on safer sex practices and attitudes toward use of safer sex practices by PLHIV in preventing the spread and transmission of HIV and STIs. The study design was selected to elicit the feelings and experiences of PLHIV on sexual behaviour modification.

### 3.2 Research Setting

The study was conducted at Chikankata Mission Hospital. The Hospital is situated 31Km off the Lusaka-Livingstone road, 125Km from Lusaka City and 62Km away from Mazabuka town (CMH, 2010). The hospital is owned by The Salvation Army and was established in 1947, and is affiliated to the Churches Health Association of Zambia (CHAZ). Various programmes take place at the Hospital and these include, Community Based Programmes such as Home Based Care, Local Community Capacity Building as well as Primary Health Care Programmes. The Hospital offers training services in AIDS Management and Psychosocial Counseling as short courses. On the other hand long term courses offered are Registered Nursing and Bio-Medical Sciences.

The Hospital offers medical-surgical, gynaecology, obstetric and paediatirc health care services. The Hospital is fully equipped with an operating theatre which operates twice weekly for elective

cases, the institution also has fully equipped laboratory and radiology departments. The study was conducted specifically in the ART clinic; a specialized clinic for HAART provision, the clinic attends to clients referred from within the Hospital setting such as the Out-Patient Department, medical and surgical wards and other specialized clinics which operate on a daily basis, theses clinics include the filter clinic, ophthalmology clinic and chest clinic. The ART clinic also attends to other clients from within and outside the Chikankata catchment area who are on HAART. The ART clinic operates from Monday to Friday however, over the weekend a nurse is on standby to attend to client related emergencies. All clients of the ART clinic are given appointments for review, with an average of 20-30 clients scheduled for reviews and follow up daily. Apart from HAART provision the ART clinic provides Information, Education and Communication, adherence counseling, nutritional supplements to PLHIV. The ART clinic also houses the Voluntary Counseling and Testing Centre which provides both pre-testing and postcounseling services to all persons visiting the centre, thereafter, those clients who turn out to test positive are referred to the ART clinic for file opening and CD4 cell monitoring. Each PLHIV has a file kept at the clinic, further each client is entered into a computerized register and each client's appointment is entered into the appointment register book. The study setting was chosen because all PLHIV on HAART attend this clinic for treatment and follow up.

## 3.3 Study Population

**Study population-** refers to the total category of persons or objects that meets the criteria for the study established by the researcher, any set of persons, objects or measurements having an observable characteristic in common (Basavanthappa, 2006). The study population only included males and females living with HIV who are on HAART aged 18 years and above.

## 3.3.1 Target population

A target population- a group of individuals who meet the sampling criteria and to which the study findings will generalised (Grove and Burns, 2009); the target population was the accessible population that included adult males and females living with HIV, on HAART, aged 18 years and above and received health care at Chikankata Mission Hospital.

### 3.3.2 Accessible population

The accessible population- this is a portion of the target population to which the researcher has reasonable access (Grove and Burns, 2009). The accessible population included adult males and females living with HIV, on HAART, 18 years and above and received health care at Chikankata Mission Hospital ART clinic during the month of October 2010.

#### 3.4 Sample Selection

**Sampling method-** is a process of selecting a group of people, events, behaviours, or other elements that are representative of the population being studied; includes probability and non-probability methods (Grove and Burns, 2009). This section explained how the district, clinic and respondents were selected.

# 3.4.1 Mazabuka District and Chikankata area

Chikankata Mission Hospital and Mazabuka District were conveniently selected. Chikankata Mission Hospital was conveniently selected because it was easily accessible to the researcher and they were less costs involved. The researcher was familiar with the hospital and this enabled collection of data within the stated time.

#### 3.4.2 ART clinic

The ART clinic was conveniently selected because, all PLHIV on HAART were reviewed from the ART clinic and facilitated easy access to the respondents. The ART clinic had over 1,700 clients and with an average number of 25 clients seen per day, as such clients gathered early in the morning by 8:00hrs for collection of baseline data such as, vital signs and attend a question and answer session before they were seen by clinicians. With this arrangement it made it convenient and easy to have a sampling frame on a daily basis and implement the simple random sampling procedure.

#### 3.4.3 Study respondents

The respondents in this study were selected using simple random selection method, which is the most basic of the probability sampling designs. Simple random selection is where elements are selected from the sampling frame for inclusion in a study. Each study element has a probability greater than zero of being selected for inclusion in the study (Grove and Burns, 2009). Further the fishbowl without replacement, which is one of the simple random sampling methods, was used to select the sample. The fishbowl method without replacement is where every member of the target population will have an equal chance of being selected (Polit and Hungler, 1997). A sampling frame of all PLHIV on HAART was made on daily basis; this sampling frame was drawn from the appointment register. Cut out pieces of paper of the same size based on the daily sampling frame were placed in a bowl, written on these pieces of paper was YES and NO. After placing the pieces of paper in the bowl and the bowl was shaken vigorously so that they were thoroughly mixed and using a blindfold each respondent was asked to pick a piece of paper from the bowl and the bowl was shaken in the same manner and another respondent picked a piece of paper. This procedure was repeated until all the respondents had picked a piece of paper from the bowl. All those who picked papers indicating YES were enrolled into the study and all those who picked papers indicating NO did not participate in the study. This procedure was repeated everyday until a sample size of 50 was reached. The method ensured that each participant had an equal chance to be included in the sample and enabled generalization of the findings. This was also more feasible in terms of time, human, financial and material resources.

#### 3.4.4 Eligibility criteria

Polit and Beck (2008), define eligibility criteria as criteria used by the researcher to designate to specific attributes of the target population and to select participants for a study. The eligible participants in the study were male and female with HIV aged 18 years and above who are on HAART.

#### 3.4.5 Inclusion criteria

Eligible participants were male and female living with HIV aged 18 years and above who are on HAART and receiving health care from Chikankata Mission Hospital ART clinic were included in the study and reside within Chikankata area. This is because those who reside within

Chikankata were not so much in a hurry to get back home, compared to those residing outside Chikankata who were in a hurry to find transport to get back their homes quickly.

#### 3.4.6 Exclusion criteria

PLHIV who attended the ART clinic but, not receiving HAART and those who were too sick for example those with encephalitis as their thought process was distorted.

#### 3.5 Sample Size

A sample size is the number of subjects or participants recruited and consenting to take part in a study (Grove and Burns, 2009); in this study a sample size of fifty (50) PLHIV on HAART attending the ART clinic was used. The sample size was the minimum required for the Bachelor of Science in Nursing Degree. The minimum sample size was used because of limited time, inadequate human resources and financial resources.

### 3.6 Operational Definition of Terms

- 1. **Regular sexual partners-** are defined as main or primary partner with whom one has an ongoing sexual relationship.
- 2. **Non-regular sexual partner-** a sexual partner met for the first time or occasionally meets without an ongoing sexual relationship.
- 3. **Safer sex practices-** are defined as sexual activity engaged in by people who have taken precaution to protect themselves against STIs and HIV these include use of condoms, abstinence and faithfulness.
- 4. Satisfactory sexual behaviour- sexual behaviour in which there is use of safer sex practices that is condom use, abstinence or faithfulness.
- 5. **Unsatisfactory sexual behaviour-** sexual behaviour in which there is no use of safer sex practices that is condom use, abstinence or faithfulness.
- 6. **Sexual behaviour-** the way that somebody behaves satisfactorily or unsatisfactorily and satisfactory sexual behaviour must comprise condom use, abstinence and faithfulness without any of these it is considered unsatisfactory sexual behaviour.
- 7. **Sexual behaviour change** steps taken not to indulge in risky behaviours that would lead to contracting and spread of HIV and STIs.

- 8. **Risky sexual behaviour** a sexual behaviour which exposes the individual to contracting or spreading of HIV such as casual sex, not using condoms.
- Low risk sexual behaviour- a sexual behaviour which does not expose the individual to contracting or spreading of HIV this includes condom use, faithfulness to one sexual partner or abstinence.
- 10. **People Living with HIV on HAART-** these are clients/patients who are HIV positive and 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 positive status, to accept and cope up with it and taking Highly Active Antiretroviral Therapy.
- 11. **ART Clinic-** a specilised clinic within Chikankata Mission Hospital were HAART is provided to PLHIV.
- 12. **Chikankata Mission Hospital-** a second level hospital found in Mazabuka District run by the Salvation Army.
- 13. Positive attitude- means safer sex practices are good as they promote protected sex.

#### 3.7 Data Collection Tool

A data collection tool is a device used to collect data (Polit and Beck, 2008). It may take the form of a questionnaire or interview schedule, checklist, focus group discussion, projected device or some other type of tool for eliciting information. In this study, the data collecting tool that was used was the Semi-structured Interview Schedule. An interview schedule is a formal instrument that specifies the wording of all questions to be asked of respondents in structured self-report studied (Polit and Beck 2008). The Semi-structured Interview Schedule was chosen because it was suitable for both illiterate and literate respondents and would allow for clarification of questions where the respondent was not clear. It was less costly and not time consuming and data analysis was easy.

The interview schedule contained four sections. Section A dealt with demographic characteristics of the respondents that were to be included in the study. Section B had questions concerning knowledge on safe sex practices, Section C focused on attitude toward safer sex practices and Section D looked at sexual behaviour. These sections were all aimed at determining sexual behaviour among PLHIV on HAART.

Data collection was done in the month of October 2010 in the ART clinic at Chikankata Mission Hospital.

#### 3.8 Validity

According to Grove and Burns (2009), validity is the extent to which the instrument actually reflects the abstract construct being examined. Validity constitutes external and internal validity.

- **3.8.1 External validity-** is the extent to which the findings of the research can be generalised to a population or to a different social, economical, political setting (Basavanthappa, 2007). To ensure external validity the sample comprised respondents from different social, economic, political, educational and religious background. Validity of the research instrument was ensured and measured by the supervisor's review of the research instrument and by conducting a pilot study before the actual study was undertaken.
- **3.8.2 Internal validity-** refers to interpretation of findings within the study or data. It is the degree to which the researcher is able to accomplish the study. It seeks to find out if the effect on the dependent variable observed was actually due to the action of the independent variable (Basavanthappa, 2007). The respondents therefore, were asked the same questions to ensure internal validity.

#### 3.9 Reliability

Reliability is the consistency of the measure obtained (Grove and Burns, 2009). The instrument will able to bring out the accurate information whereby, if the same instrument after some time is used will yield the same responses. Reliability includes the following types; stability, internal consistency and equivalence.

3.9.1 Stability of the measure- refers "to the extent to which the same results are obtained on repeated administration of the instrument" (Grove and Burns, 2009). It is usually referred to as test-retest reliability. The estimation of reliability focuses on the instrument's susceptibility to extraneous factors from the administration of the next. Assessment of the stability of the measuring tool is derived through procedures that evaluate test-retest reliability. Therefore, the same tool was administered to a sample of individuals in a pilot study before conducting the main study. The pilot study was conducted objectively.

3.9.2 Internal consistency (homogeneity) - in terms of reliability of the instrument "this is the degree to which the subparts are internally consistent, that is measuring the same critical attribute" (Grove and Burns, 2009). Different questions having the same construct. The interview schedule was prepared in such a way that it had sections with different questions measuring the same characteristics. For instance, Section A measured demographic characteristics of the respondents, Section B measured knowledge on safer sex practices, Section C established attitude toward safer sex practices and Section D determined sexual behaviour of PLHIV.

**3.9.3 Equivalence-** is the method of determining reliability in which at least two different forms of an instrument are administered to the same individual and scores are then correlated (Basavanthappa, 2007).

The results of the pilot study were used as baseline data to test reliability. The same interview schedule was administered through out the study, and biases were eliminated as the same questions were asked to all respondents. Reliability of the instrument was measured by conducting a pilot study. Amendments to the instrument were be made and this helped in eliminating biases and minimized errors during data collection.

## 3.10 Data Collection Technique

Data collection technique is a process of gathering information needed to address a research problem (Polit and Hungler, 1997). In this study, interview was used to collect information from respondents and this was done from an office, allocated by the In-charge of the ART clinic. The office was made of concrete walls and was arranged to provide privacy and confidentiality. On each day, the researcher interviewed five clients and privacy was highly maintained. The interviews were conducted with doors closed and I reassured my clients that the information shared in the discussion was not going to be shared with any person. The respondents were informed that their names were not written on the questionnaires or used in any form.

Questions were asked on face to face basis and clarification on questions and answers were done but, still maintaining the same meaning. The questionnaire contained both open-ended and closed-ended questions. The Interview was selected in this study as it was appropriate to clarify facts.

#### 3.11 Pilot Study

According Grove and Burns (2009), a pilot study is a smaller version of the proposed study conducted to develop or refine the methodology, such as the treatment, instrument, or data collection. It is a trial 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.

The pilot study was conducted at the Mazabuka District Hospital ART Clinic to assess the feasibility of the study, and to make necessary adjustments to the Semi-structured Interview Schedule to ensure validity and reliability. The aim of the pilot study was to identify and correct errors identified before the main study was conducted. The sample size for the pilot study was (10%) of the total anticipated study sample, which in this case 50. This translated into five respondents for the pilot study. The respondents were selected using simple random sampling method.

### 3.12 Ethical and Cultural Considerations

Ethics is defined as a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants. There three ethical principles namely beneficence, respect for human dignity and justice (Polit and Beck, 2006).

3.12.1 Beneficence- an obligation to do no harm and to maximise possible benefit. A person's decisions are respected and efforts are made to ensure their wellbeing (Wood and Haber, 2006). Participants were not subjected to any harm as the research was not involving any invasive procedures. The participants were protected from psychological harm by letting them answer questions in a private room, as they were interviewed one by one on a face to face basis and those not willing to participate were not forced.

**3.12.2 Respect for persons-** means that, persons have the right to self-determination and the freedom to participate or not to participate in the research (Grove and Burns, 2009). This was explained to the individual participants that they had the freedom to participate or not to participate in the study. The respondents were assured of the confidentiality of personal information shared with the researcher, and that no names were going appear on the

questionnaire. Those who took part in the study were requested to sign the consent form while, those who refused to participate were assured of not withdrawing of services to them.

**3.12.3 Justice-** is one of the principles which emphasises that human subjects be treated fairly (Wood and Haber, 2006). In this study justice was upheld by ensuring that favouritism was not shown to any of the participants as they were all treated equally. Selection was fairly done so that everyone had an equal chance of been selected using simple random sampling.

Before collection of data for the pilot and actual study, written permission was obtained from Mazabuka District Hospital and Chikankata Mission Hospital. Permission was sought from each and every respondent. Self introduction was done and the purpose of the study was explained to the respondents. No respondent was forced to take part in the study and those who wanted to withdraw were free to do so. The respondents were assured of anonymity and confidentiality by ensuring that names were not used on the interview schedule and in the final report.

#### **CHAPTER 4**

## 4.0 DATA ANALYSIS AND PRESENTATION OF FINDINGS

#### 4.1 Data Analysis

Data analysis is the systematic organisation and synthesis of research data, and the testing of research hypothesis using those data (Polit and Beck, 2005). The data will be analysed according to the interview schedule items. Data will reorganized according to the four major sections that are demographic data, data on knowledge, data on use of safe sex practices and data on attitude. Both qualitative and quantitative data will be analysed.

#### 4.1.1 Quantitative Data

Defined by Polit and Beck (2005) as information collected in the course of a study that is in a quantified or numeric form. Before data was entered it was checked for accuracy, completeness, uniformity and internal consistency. The responses from closed ended questions were entered on a data master sheet using manual system. Then the data was displayed on frequency tables and pie charts.

#### 4.1.2 Qualitative Data

This is information collected in the course of a study that is in narrative or non-narrative form (Polit and Beck, 2005). For open ended questions each response was transcribed, read and reread to get the concepts in the responses. All similar ideas and impressions were written down in themes on Microsoft word 2007 and displayed using frequency tables.

### 4.2 Presentation of Findings

## 4.2.1: Section A Demographic Data

Demographic data was solicited from respondents and six (6) questions were asked. The following were the findings presented by use of 4 frequency tables and 2 figures.

Table4.1: Respondents age (n-50)

Age	Number of	Percentage
	Respondents	(%)
21-34	11	22
35-48	26	52
49-62	6	12
63-Above	7	14
Total	50	100

This table shows that the majority of respondents 26 (52%) were in age group 35-48, while 6 (12%) were in age group 49-62.

Table 4.2: Respondent's gender (n-50)

Gender	Number of Respondents	Percentage (%)
Female	32	64
Male	18	36
Total	50	100

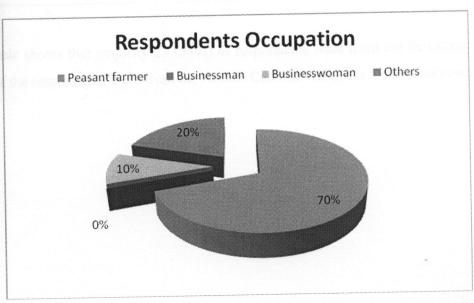
Majority of the respondents were female 32 (64%) while, 18 (36%) were male respondents.

Table 4.3: Respondent's level of education (n-50)

Education	Number of Respondents	Percentage (%)	
Never	6	12	
Primary	33	66	
Secondary	9	18	
College	2	4	
University	0	0	
Total	50	100	

Majority of the respondents 33 (66%) had primary education while, 2 (4%) of the respondents had college education.

Figure 4.1: Respondent occupation (n-50)



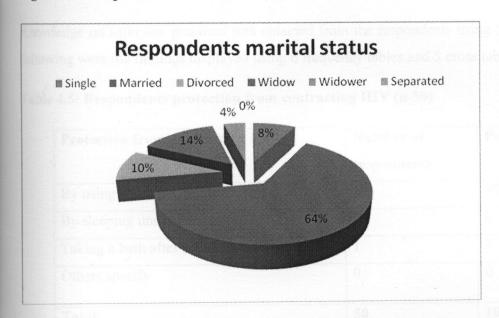
This figure shows that majority 35 (70%) of the respondents were peasant farmers while, 5 (10%) of the respondents were businesswomen.

Table 4.4: Respondent's Denomination (n-50)

Denomination	Number of Respondents	Percentage (%)	
Salvation Army	27	54	
Pentecostal Assemblies	3	6	
U.C.Z	0	0	
Roman Catholic	2	4	
S.D.A	10	20	
New Apostolic Church	6	12	
Jehovah's Witness	0	0	
Others	2	4	
Total	50	100	

This table shows that majority 27 (54%) of respondents were from the Salvation Army while, 2 (4%) of the respondents were from the Roman Catholic Religious Denominations.

Figure 4.2: Respondent's marital status (n-50)



Majority of the respondents 32 (64%) were married while, 2 (4%) were widowers.

# 4.2.2: Section B Knowledge on Safe Sex Practices

Knowledge on safer sex practices was obtained from the respondents using 5 questions and the following were the findings displayed using 6 frequency tables and 5 cross tabulation tables.

Table 4.5: Respondents protection from contracting HIV (n-50)

respondents	Percentage (%)	
49	98	
0	0	
1	2	
0	0	
50	100	
	49 0 1 0	

Majority of the respondents 49 (98%) indicated that protection from contracting HIV is by use of condoms while, 1 (2%) indicated that taking a bath after sexual intercourse was a means of protecting oneself from contracting HIV.

Table 4.6: Respondents understanding of safe sex practices (n-50)

Understanding of safe sex practices	Number of Respondents	Percentage (%)
These are methods to protect oneself from contracting HIV	49	98
When one practices sexual cleansing	0	0
When one has sex with children	0	0
When one consults traditional healers for protection	1	2
Total	50	100

Majority of the respondents 49 (98%) understood the meaning of safer sex practices.

Table 4.7: Respondents answer on which one is a safer sex practice (n-50)

Which one below is a safer sex practice	Number of Respondents	Percentage (%)
Washing of genital organs before sexual	2	4
intercourse		
Using herbs before sexual intercourse	0	0
Using condoms	34	68
Sticking to one sexual partner	14	28
Total	50	100

Majority of the respondents 34 (68%) identified condom use as a safer sex practice while, 2 (4%) identified washing of genital organs before sexual intercourse as a safer sex practice.

Table 4.8: Respondents knowledge on abstinence (n-50)

What is abstinence	Number of	Percentage (%)
	Respondent	
Not eating food	1	2
No indulgence in any sexual activity	49	98
Having more than one sexual partner	0	0
Total	50	100

Majority of the respondents 49 (98%) indicated that abstinence meant no indulgence in any sexual activity while, 1 (2%) indicated that abstinence meant not eating food.

Table 4.9: Respondents knowledge on faithfulness (n-50)

Number of	Percentage (%)	
Respondents		
0	0	
46	92	
4	8	
50	100	
	Respondents  0 46 4	

This table shows that majority of the respondents 44 (92%) indicated faithfulness meant sticking to one faithful sexual partner and 4 (8%) indicated faithfulness meant coming home early.

Table 4.10: Total knowledge of respondents (n-50)

Respondents Knowledge	Number of	Percentage (%)	
	Respondents		
Low Knowledge	1	2	
High Knowledge	49	98	
Total	50	100	

This table shows that majority of respondents 49 (98%) had high knowledge on safer sex practices while, 1 (2%) had low knowledge on safer sex practices.

Table 4.11: Relationship between knowledge and age (n-50)

Knowledge	Age				Total
	21-34	35-48	49-62	63- above	
Low	1(2%)	0(0%)	0 (0%)	0 (0%)	1 (2%)
High	10 (98%)	26 (100%)	6 (100%)	7 (100%)	49 (98%)
Total	11 (100%)	26 (100%)	6 (100%)	7 (100%)	50 (100%)

This table shows that majority 26 (100%) of respondents in age group 35-48 were knowledgeable on safer sex practices while, 1 (2%) in age group 21-34 were not knowledgeable on safer sex practices.

Table 4.12: Relationship between knowledge and gender (n-50)

Knowledge	Gender	Total	
	Female	Male	
Low	1 (3%)	0 (0%)	1 (2%)
High	31 (97%)	18 (100%)	49 (98%)
Total	32	18 (100%)	50 (100%)
	(100%)		

This table shows that majority 18 (100%) of the male respondents were knowledgeable on safer sex practices while, in 1(3%) of the female respondents were not knowledgeable on safer sex practice.

Table 4.13: Relation between knowledge and education (n-50)

Knowledge	Educatio	n				Total	
	Never	Primary	Secondary	College	University		
Low	1(16%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	
High	5(84%)	33 (100%)	9 (100%)	2 (100%)	0 (0%)	49 (98%)	
Total	6 (100%)	33 (100%)	9 (100%)	2 (100%)	0 (0%)	50 (100%)	

This table shows that majority 33 (100%) of the respondents who had reached primary school were knowledgeable on safer sex practices while, 1 (16%) of the respondents who had never been to school were not knowledgeable on safer sex practices.

Table 4.14: Relation between knowledge and denomination (n-50)

Knowledge Denominat	Denomi	nation							Total
	S. A	P.A	U.C.Z R.C	R.C	S.D.A	S.D.A N.A.C J.W	J.W	Others	
Low	(%0) 0	(%0) 0	0 (0%) 0 (0%) 1(10%) 0 (0%) 0 (0%) 0 (0%)	(%0) 0	1(10%)	(%0) 0	(%0) 0	(%0) 0	1(2)
High	27 (100%)	3 (100%)	(100%) 0 (0%) 2	2 (100%)	2 9 6 (100%) (90%) (100%)	(100%)	(%0) 0	2 (100%) 49 (98%)	49 (98%)
Total	27 (100%)	<u> </u>	(100%) 0 (0%)	., -	2 10 6 (100%) (100%) (100%)	6 (100%)	(%0) 0	2 (100%)	0 (0%) 2 (100%) 50 (100%)
				,					

This table shows that majority 27 (100%) of the respondents from the Salvation Army were knowledgeable on safer sex practices while, I (10%) from the Seventh Day Adventist were not knowledgeable on safer sex practices.

Table 4.15: Relationship between knowledge and marital status (n-50)

Knowledge	Marital	Status					Total
	Single	Married	Divorced	Widow	Widower	Separated	
Low	0 (0%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)
High	4 (1000/)	31	5 (100%)	7 (100%)	2 (100%)	0 (0%)	49 (98%)
Total	(100%)	(97%)	5	7	2 (100%)	0 (100%)	50 (100%)
T 0.0001	(100%)	(100%)	(100%)	(100%)			

This table shows that majority 4 (100%) of the single respondents were knowledgeable on safer sex practices in while, 1 (3%) of married respondents were not knowledgeable on safer sex practices.

## 4.2.3 Section C Attitude Toward Safer Sex Practice

Attitude toward safer sex practices was obtained using two questions, the first question was a qualitative question and the second question was a quantitative question and the findings are presented below using two frequency tables and seven cross tabulation using frequency table 4.17 which has quantitative responses.

Table 4.16: Respondents opinion on use of safer sex practices (n-50)

Opinion on use of safer sex	Number of Respondents	Percentage (%)
practices		
Good as they promote protected sex and faithfulness	37	74
Improve quality of life	6	12
Encourage good sexual behaviour	7	14
Total	50	100

Majority of the respondent 37 (74%) had positive opinion with regard to use of safer sex practices.

Table 4.17: Response if found with an STI (n-50)

Protecting sexual partner if found with STI	Number of respondents	Percentage (%)
I would go to the clinic	37	72
I would use a condom	10	22
I would tell my partner	2	4
I would treat myself with herbs	1	2
Total	50	100

Majority of the respondents 37 (72%) would go to the clinic while, 1 (2%) would treat themselves using herbs.

Table 4.18: Total Attitude toward safer sex practices (n-50)

Respondents attitude	Number of	Percentage (%)
	Respondents	
Positive	11	22
Negative	39	78
Total	50	100

Majority of the respondents 39 (78%) had negative attitude toward safer sex practices while, 11 (22%) had positive attitude toward safer sex practices.

Table 4.19: Relationship between attitude and age (n-50)

Attitude	Age grou	ıp			Total
	21-34	35-48	49-62	63- above	
Positive	0 (0%)	7 (27%)	0 (0%)	4(57%)	11(22%)
Negative	11 (100%)	19 (73%)	6 (100%)	3 (43%)	39 (78%)
Total	11 (100%)	26 (100%)	6 (100%)	7 (100%)	50 (100%)

This table shows that majority 11 (100%) of respondents in age group 21-34 had negative attitude toward safer sex practices while, 7 (27%) of respondents in age group 35-48 had positive attitude toward safer sex practices.

Table 4.20: Relationship between attitude and gender (n-50)

Attitude	Gender		Total
	Female	Male	
Positive	8	3	11(22%)
	(25%)	(20%)	
Negative	24	15	39 (78%)
	(75%)	(80%)	
Total	32	18	50 (100%)
	(100%)	(100%)	

Majority of the male respondents 15 (80%) had negative attitude toward safer sex practices while, 8 (25%) of the female respondents had positive toward safer sex practices.

Table 4.21: Relationship between attitude and education (n-50)

Attitude	Educatio	n				Total
	Never	Primary	Secondary	College	University	
Positive	(33%)	8 (32%)	1 (13%)	0 (0%)	0 (0%)	11(22%)
Negative	(67%)	25 (68%)	8 (87%)	(100%)	0 (0%)	39 (78%)
Total	6 (100%)	33 (100%)	9 (100%)	2 (100%)	0 (100%)	50 (100%)

This table shows that 2 (100%) of respondents with college education had negative attitude toward safer sex practices while, 2 (33%) of respondents who attained no form of education had a positive attitude toward safer sex practices.

Table 4.22: Relationship between attitude and occupation (n-50)

Attitude	Occupati	ion			Total
	Peasant farmer	Businessman	Businesswoman	Others	
Positive	9(26%)	0 (0%)	0 (0%)	2(22%)	11(22%)
Negative	26 (74%)	1 (100%)	5 (100%)	9 (78%)	39 (78%)
Total	35 (100%)	1 (100%)	5 (100%)	11(100%)	50 (100%)

Others: teachers, a farm worker, Health Medic, house wife and those with no occupation.

This table shows that majority 5 (100%) of respondents who were businesswomen had negative attitude toward safer sex practices while, 9 (26%) of the respondents who were peasant farmers had positive attitude toward safer sex practices.

Table 4.23: Relationship between attitude and Religious Denomination (n-50)

S. A									
		.A	U.C.Z	R.C	S.D.A	S.D.A N.A.F J.W	J.W	Others	
Positive 9	0	(%0)	(%0) 0	-	1(10%)	1(10%) 0 (0%) 0 (0%)	(%0) 0	(%0) 0	11(22%)
(33%)	(%			(20%)					
Negative 18	3	(100%)	3 (100%) 0 (0%)	1(50%) 9	6	9	(%0) 0	2 (100%) 39 (78%)	39 (78%)
(%/29)					(%06)	(100%)	_		
Total 27	3	3 (100%) 0 (0%)	(%0) 0	2	10	9	(%0)0	2 (100%)	0 (0%) 2 (100%) 50 (100%)
(100	(100%)			(100%)	(100%) (100%) (100%)	(100%)			

This table shows that majority 3 (100%) of respondents who were from Pentecostal Assemblies had negative attitude toward safer sex practices while, 1 (10%) of respondents who were from S.D.A had positive attitude toward safer sex practices.

Table 4.24: Relationship between attitude and marital status (n-50)

Attitude	Marital	status					Total
	Single	Married	Divorced	Widow	Widower	Separated	
Positive	1 (25%)	9 (28%)	1 (20%)	1 (14%)	0 (%)	0 (0%)	11(22%)
Negative	3 (75%)	23 (72%)	4 (80%)	6 (86%)	2 (100%)	0 (0%)	39 (78%)
Total	4 (100%)	32 (100%)	5 (100%)	7 (100%)	2 (100%)	0 (100%)	50 (100%)

This table shows that majority 2 (100%) of respondents who are widowers had negative attitude toward safer sex practices while, 1 (14%) of respondents who are widows had positive attitude toward safer sex practices.

#### 4.2.4 Section D Sexual Behaviour

Sexual behaviour responses were obtained from respondents using 13 questions, nine closed ended questions and four open ended questions. The findings are presented using 13 frequency tables and eight cross tabulation tables.

Table 4.25: Respondents change in sexual behaviour (n-50)

Change in sexual behaviour	Number of respondents	Percentage (%)
I use condoms whenever having sex	19	38
I am faithful to my sexual partner	15	30
I am practicing abstinence	16	32
I have reduced on the number of sexual partners	0	0
Others	0	0
Total	50	100

This table shows that majority of respondents 19 (38%) indicated that they were using condoms while, 15 (30%) were faithful to their sexual partners.

Table 4.26: Respondents use of condoms whenever having sex (n-50)

Condom use whenever having sex	Number of Respondents	Percentage (%)
Yes	41	82
No	9	18
Total	50	100

Majority of the respondents 41 (82%) were using condoms whenever having sex while, 9 (18%) were not using condoms.

Table 4.27: Respondents reasons for not using condoms (n-9)

Reason for not using	Number of Respondents	Percentage (%)
Completely abstaining	6	67
No sexual satisfaction	1	11
Need to have a child	1	11
Non availability of condoms	1	11
Total	9	100

Majority of the respondents 6 (67%) were completely abstaining while, 1 (11%) did not get sexual satisfaction when using condoms.

Table 4.28: Respondents condom use at last sexual intercourse (n-50)

Condom use at last sexual intercourse	Number of	Percentage (%)
	Respondents	
Yes	35	70
No	15	30
Total	50	100

Majority of the respondents 35 (70%) had used condoms at last sexual intercourse while, 15 (30%) did not use condoms at last sexual intercourse.

Table 4.29: Respondents reason for not using condom at last sexual intercourse (n-15)

Reason for not using	Number of Respondents	Percentage (%)
condom		
Abstaining	10	67
Refusal by partner	2	13
No sexual gratification	1	7
Need to have child	1	7
Undiagnosed HIV status before spouse died	1	7
Total	15	100

Majority of the respondents 10 (67%) were completely abstaining while, 2 (13%) did not use condoms as their sexual partners refused.

Table 4.30: Respondents condom use with regular sexual partner (n-50)

Condom use with regular sexual partner	Number of	Percentage (%)
	Respondents	
Yes	34	72
No	16	28
Total	50	100

Maj

ority of the respondents 34 (72%) were using condoms with their regular sexual partners while, 16 (28%) were not using condoms with their sexual partners.

Table 4.31: Respondents with non-regular sexual partners' (n-50)

Respondents with non-regular sexual partners females	Number of Respondents	Percentage (%)
Yes	1	2
No	49	98
Total	50	100

Majority of the respondents 49 (98%) had regular sexual partners while, 1 (2%) had non-regular sexual partners.

Table 4.32: Respondents condom use with non-regular sexual partner (n-1)

Condom use with non-regular sexual partners	Number of Respondents	Percentage (%)
Yes	1	100
No	0	0
Total	1	100

This table shows that 1(100%) of respondents with non-regular sexual partners were using condoms.

Table 4.33: Respondents negotiating for safer sex practices (n-50)

Negotiating for safer sex practices	Number of	Percentage (%)
	Respondents	
Yes	45	90
No	5	10
Total	50	100

Majority of the respondents 45 (90%) were negotiating for safer sex practices while, 5 (10%) were not negotiating for safer sex practices with their sexual partners.

Table 4.34: Respondents reasons for not negotiating for safer sex practices (n-5)

Reasons for not negotiating for safer sex	Number of	Percentage (%)
practices	Respondents	
I feel shy to negotiate for safer sex practices	0	0
My partner does want to negotiate	1	20
I fear to be rejected	0	0
I trust my partner	0	0
Others, specify	4	80
Total	5	100

Others: no sexual partner 2 single, 2 divorced

Majority of the respondents 4 (80%) were not negotiating for safer sex practices as they had no sexual partners to negotiate with either because they were divorced or single while, 1 (20%) of respondents did not negotiate for safer sex practices due to sexual partner's refusal to negotiate.

Table 4.35: Respondents alcohol consumption (n-50)

Alcohol consumption among PLHIV	Number of	Percentage (%)
	Respondents	
Yes	7	14
No	43	86
Total	50	100

Majority of the respondents 43 (86%) were not taking alcohol while, 7 (14%) were taking alcohol.

Table 4.36: Respondents sexual behaviour when under the influence of alcohol (n-7)

Number of Respondents	Percentage (%)
6	86
1	14
7	100
	6

Majority of the respondents 6 (86%) were involved in low risk sexual behaviour when under the influence of alcohol while, 1 (14%) of the respondents said they had protected sex.

Table 4.37: Respondents sexual behaviour on HAART (n-50)

Sexual behaviour on	Number of	Percentage (%)
HAART	Respondents	
Protected sex with regular sexual partner	12	24
One sexual partner	22	44
Abstaining	12	24
Low risk sexual behaviour	4	8
Total	50	100

This table shows that majority 22 (44%) of respondents had maintained one sexual partner while on HAART while, 4 (8%) said they were involved in low risk sexual behaviour.

Table 4.38: Respondents sexual behaviour (n-50)

Sexual behaviour	Number of Respondents	Percentage (%)
Satisfactory	37	74
Unsatisfactory	13	26
Total	50	100

Majority of the respondents 37 (74%) had a satisfactory sexual behavior while, 13 (26%) had an unsatisfactory sexual behaviour.

Table 4.39: Relationship between sexual behaviour and age (n-50)

Sexual behaviour	Age	Total			
	21-34	35-48	49-62	63- above	
Satisfactory	6 (54%)	21 (81%)	5 (83%)	5 (71%)	37 (74%)
Unsatisfactory	5 (46%)	5 (19%)	1 (7%)	2 (29%)	13 (26%)
Total	11 (100%)	26 (100%)	6 (100%)	7 (100%)	50 (100%)

This table shows that majority 5 (83%) of the respondents in age group 49-62 had a satisfactory sexual behaviour while, 5 (19%) of the respondents in age group 35-48 had an unsatisfactory sexual behaviour.

Table 4.40: Relationship between sexual behaviour and gender (n-50)

Sexual behaviour	Gender	Total	
	Female	Male	
Satisfactory	20 (62%)	17 (94%)	37 (100%)
Unsatisfactory	12 (38%)	1 (6%)	13 (26%)
Total	32	18 (100%)	50 (100%)
	(100%)		•

Majority of the male respondents 17 (94%) had a satisfactory sexual behaviour while, 12 (38%) of female respondents had an unsatisfactory sexual behaviour.

Table 4.41: Relationship between sexual behaviour and education (n-50)

Sexual behaviour	Education	Total				
	Never	Primary	Secondary	College	University	
Satisfactory	2 (40%)	27 (79%)	7(75%)	2 (100%)	0 (0%)	38 (76%)
Unsatisfactory	3(60%)	7 (21%)	2 (25%)	0 (0%)	0 (0%)	12 (24%)
Total	5 (100%)	34 (100%)	9 (100%)	2 (100%)	0 (0%)	50 (100%)

This table shows that majority 2 (100%) of the respondents who attained college education had a satisfactory sexual behaviour while, 7 (21%) of the respondents who reached primary school had an unsatisfactory sexual behaviour.

Table 4.42: Relationship between sexual behaviour and occupation (n-50)

Sexual behavior	Occupati	Total			
	Peasant farmer	Businessman	Businesswoman	Others	
Satisfactory	26 (76%)	1 (100%)	4 (80%)	6 (75%)	37 (74%)
Unsatisfactory	10 (24%)	0 (0%)	1 (20%)	2 (25%)	13 (26%)
Total	36 (100%)	1 (100%)	5 (100%)	8 (100%)	50 (100%)

Others: teachers, a farm worker, Health Medic, house wife and those with no occupation.

This table shows that majority 1 (100%) of the respondents who were businessmen had a satisfactory sexual behaviour while, 1 (20%) of the respondents who were businesswomen had an unsatisfactory sexual behaviour.

Table 4.43: Relationship between sexual behaviour and Religious Denomination (n-50)

behaviour S. A	<b>D</b>								
		P. A	U.C.Z R. C	R. C	S.D.A	N. A.F	J. W	Others	
Satisfactory 20		3	(%0) 0	1 (50%)	0 (0%) 1 (50%) 6 (60%) 5 (83%)	5 (83%)	(%0) 0	2 (100%)	37
7()	(74%)	(100%)							(74%)
Unsatisfactory 7		(%0) 0	(%0) 0	1 (50%)	(0%) 0 (0%) 1 (50%) 4 (40%) 1 (17%)	1 (17%)	(%0) 0	0 (0%)	13
(20	(56%)								(26%)
Total 27		8	0	7	10	6 (100%)	6 (100%) 0 (100%) 2 (100%)	2 (100%)	20
	(%00	(100%)	(100%)	(100%) (100%) (100%) (100%) (100%)	(100%)				(100%)

Others: Free Prophecy church and no Denomination

behaviour while, 1 (17%) of the respondents who were from New Apostolic Faith church had an unsatisfactory sexual behaviour. This table shows that majority 3 (100%) of the respondents who were from Pentecostal Assemblies had a satisfactory sexual

Table 4.44: Relationship between sexual behaviour and marital status (n-50)

Sexual	Marital Status						
behaviour	Single	Married	Divorced	Widow	Widower	Separated	
Satisfactory	2 (50%)	30 (94%)	2 (40%)	1(14%)	2 (100%)	0 (0%)	37 (74%)
Unsatisfactory	2 (50%)	2 (6%)	3 (60%)	6 (86%)	0 (0%)	0 (0%)	13 (26%)
Total	4 (100%)	32 (100%)	5 (100%)	7 (100%)	2 (100%)	0 (0%)	50 (100%)

This table shows that majority 2 (100%) of the respondents who were widowers had a satisfactory sexual behaviour while, 6 (86%) of the respondents who were widows had an unsatisfactory sexual behaviour.

## 4.2.5 Section E Relationship among Study Variables

Table 4.45: Relationship between knowledge and attitude (n-50)

Knowledge	Attitude	Total	
	Positive	Negative	
High	11 (100%)	38 (78%)	49 (98%)
Low	0 (0%)	1 (22%)	1 (2 %)
Total	11 (100%)	39 (100%)	50 (100%)

This table shows that majority 11 (100%) of the respondents who were knowledgeable had positive attitudes toward safer sex practice while, 1 (22%) of the respondents who were not knowledgeable had negative attitudes toward safer sex practices.

Table 4.46: Relationship between attitude and sexual behaviour (n-50)

Attitude	Sexual behav	Total	
	Satisfactory	Unsatisfactory	
Positive	8 (22%)	3 (27%)	11(22%)
Negative	28 (78%)	11 (73%)	39 (78%)
Total	36 (100%)	14 (100%)	50 (100%)

Majority of the respondents 11 (73%) who had negative attitudes toward safer sex practices had an unsatisfactory sexual behaviour while, 8 (22%) of the respondents who had positive attitude toward safer practices had a satisfactory sexual behaviour.

Table 4.47: Relationship between knowledge and sexual behaviour (n-50)

Knowledge	Sexual behav	Total	
	Satisfactory	Unsatisfactory	
High	37 (100%)	12 (92%)	49 (98%)
Low	0 (0%)	1 (8%)	1(2%)
Total	37(100%)	13 (100%)	50 (100%)

Majority of the respondents 37 (100%) who were knowledgeable had a satisfactory sexual behaviour while, 1 (8%) of the respondents who were not knowledgeable had an unsatisfactory sexual behaviour.

#### **CHAPTER 5**

#### 3.0DISCUSSION OF FINDINGS

#### 3.1 Characteristics of the Sample

The sample for data analysis consisted of 50 People Living with HIV (PLHIV) who were on HAART. Fifty two percent of the respondents were in the age group 35-48 followed by (22%) in the age group of 21-34. Those in age group 63 and above were (14%) and age group 49-62 were at (12%) (Table 4.1). The age of the respondents ranged from 21 to 73 years, and the mean age was 44 years. These findings were in agreement with results that HIV affects the most productive age groups in the Zambia population with age ranges of 18-45 years with an overall prevalence rate of (3.7%) to (21.1%) (MoH and NAC, 2010).

Almost two thirds (64%) of the respondents were female and 18 (36%) were male (Table 4.2). The findings were in agreement with Chikankata ART clinic statistics which revealed that as of October 2010, the percentage of female patients on HAART was 62(%) while, that of male patients was (38%) (CMH, 2010). The findings are also in agreement with the national population figures which put the female population at (56%) and males at (44%) (CSO, 2000) and that the HIV prevalence between females and males is (16.8%) and (12.3%) respectively (NAC, 2009). The higher female figures could be related to the fact that women are more susceptible to HIV infection than men, due to cultural practices such as polygamous marriages, gender based violence and sexual cleansing and low condom use.

In terms of education level, two thirds of the respondents 33 (66%) reached primary school while, six (12%) had never been to school (Table 4.3). On further analysis it was noted that out of the twelve percent who had never been to school (83%) were female and (17%) were male respondents. The findings denote lack of support for the females due to economic factors such as poverty, the low value placed on education by rural families were it is considered that a male child will bring more returns to the family than a female child. The findings were in agreement with national figures on literacy levels,

(70%) of males in Zambia are reported to be literate while, literacy levels for females are at (60%) (Zambia, 2010).

Regarding occupation 35 (70%) respondents were peasant farmers while, five (10%) were businesswomen (Figure 4.1). The findings show that Chikankata's main economic activity is agriculture while, few women are involved in income generating activities such as selling second hand clothes, fresh vegetables at the market to feed their families.

In reference to religious denomination 27(54%) of the respondents were from the Salvation Army Church while, 4 percent were from the Roman Catholic Church (Table 4.4). The situation is like this because Chikankata area was first evangelised by the Salvation Army missionaries who settled in the area in 1945, with the hospital opening two years later (Watson, 2010). This explains that most people in Chikankata have strong ties with the Salvation Army making it a household name.

With reference to marital status almost two thirds (64%) of the respondents were married while, two (4%) were widowers (Figure 4.2). Further analysis showed that out of the (64%) who were married 56 percent were female and 44 percent were male respondents. The findings were in agreement with studies done in the country that show that females get married early with a median age of 18.2 for women between 25-49 compared with men who marry later at a median age of 23.5 (CSO, 2007). The findings could also be attributed to traditional values in the African society, that when a girl comes of age she is ready to get married. Lower educational levels seem to be factor to consider, as noted in the same CSO (2007) study the more women get educated the longer they take to get married, this implies that less educated women get married very early. The polygamous practice found in Chikankata could be a contributing factor to high numbers of females been married; on the other hand socio-economic factors also contribute to this as females are generally more dependent on males for their livelihood and hence tend to get married early.

## 3.2 Discussion of each Variable

## 5.2.1 Knowledge on safer sex practices

Safer sex practices in this study were defined as, sexual activity engaged in by people who have taken precaution to protect themselves against STIs and HIV, these include the use of condoms, abstinence and faithfulness. The findings in this study revealed that 49 (98%) of the respondents identified the use of condoms as a means of protecting oneself from contracting HIV while, one (2%) indicated that taking a bath after sexual intercourse was a means of protecting oneself from contracting HIV (Table 4.5). The two percent was significant in this study as some PLHIV have not yet understood that HIV is contracted sexually, the findings were in agreement with NAC (2009) report, in which it is said that knowledge of condoms as a tool to protect oneself from contracting HIV was not enough and this was attributed to socio-cultural factors.

The study showed that 49 (98%) of the respondents had an understanding of what safer sex practice were while, one (2%) did not understand what safer sex practices were (Table 4.6) and this was depicted by the respondent indicating that safer sex practices are when one consults a traditional healer for protection. Despite the (98%) giving a correct response, the (2%) paint a picture of how traditional beliefs are so entrenched into the minds of the people and how much faith people have in traditional healers including their messages related to HIV. On observation the people of Chikankata generally have a lot of confidence in traditional healers and a good number would seek health care services when their conditions became worse or combine both modern and traditional modes of treatment.

Majority of the respondents (68%) identified condom use as a safer sex practice and two (4%) identified washing of genital organs before sexual intercourse as a safer sex practice (Table 4.7). The sixty eight percent demonstrated high knowledge by identifying the use of condoms as a safer sex practice. This could be attributed to the good and effective IEC given to PLHIV, this also indicated that compliance to condom use may be higher, however, four percent of the respondents demonstrated knowledge deficits on basic facts

about safer sex practices and this could be associated with various factors such as not attending IEC sessions at the ART clinic. According to a study done by Hamwiibu (2008) unpublished, (46%) of PLHIV attended IEC sessions at Lusaka's University Teaching Hospital Medical Clinic which was a low turn out thus, PLHIV were not be receiving the necessary information on matters such as safer sex practices. On the other hand high illiteracy levels are also a factor to consider as four percent of respondents, on further examination had never been to school and this could have made it impossible for PLHIV to understand basic facts on HIV prevention.

According to table 4.8, the majority of the respondents 49 (98%) indicated the right definition of abstinence while, one (2%) indicated that abstinence meant not eating food. The results demonstrate high knowledge by the (98%) and this could be associated with good literacy levels however, the two percent showed lack of knowledge and this was directly related to the respondent's illiteracy level as on further analysis, it was revealed the respondent was a female who had never been to school. The finding imply that women empowerment with regard to education is central in combating HIV.

The study revealed that majority of respondent 46 (92%) identified faithfulness as sticking to one faithful sexual partner while, four (8%) identified faithfulness as coming home early (Table 4.9). Despite the (92%) having an understanding of what faithfulness meant, the eight percent demonstrated knowledge deficit on this subject matter by associating faithfulness to coming home early. This means that PLHIV could be involved in risky sexual behaviour without really understanding that having one sexual partner who is equally faithful to them is central in the control of HIV.

The relationship between knowledge and age groups revealed that, six (100%) of respondents in age group 49-62 had high knowledge on safer sex practices in comparison to one (2%) in age group 21-34 who had low knowledge on safer sex practices (Table 4.11), this is rather an unusual finding as it is expected that the younger generation should have had more knowledge on safer sex practices, as these are expected to be literate, and to have access to information from both electronic and print media and from influence of peer educators on HIV prevention measures.

On knowledge in relation to gender, the study revealed that 18 (100%) of the male respondents had high knowledge on safer sex practices while, one (3%) of the female respondents had low knowledge on safer sex practices (Table 4.12). The high knowledge levels demonstrated by the male respondents could be associated to high literacy levels among male respondents, as out of the six (12%) who had never been to school only one (17%) of the male respondent had never been to school. The reason could be related to the fact male PLHIV, according to Hamwiibu's (2008) unpublished study (46.4%) of male PLHIV received IEC more frequently at Lusaka's University Teaching Hospital Medical Clinic. The three percent of the female respondents who showed low knowledge on safer sex practices is attributed to high illiteracy levels; it was noted that the female respondent had never been to school and when knowledge was cross tabulated with education levels on table 4.13, two (100%) of respondents who had attained college education were all males respondents while, sixteen percent of the respondents who had low knowledge had never been school (Table 4.13). These findings show that without any form of education, understanding basic facts as it relates to HIV and safer sex practices is impossible in an environment of high illiteracy levels. A literate society is better placed to access information on HIV and its prevention.

Concerning knowledge in relation to religious denominations the study revealed that, 27 (100%) of the respondents from the Salvation Army had high knowledge on safer sex practices compared to one (10%) low knowledge levels from the S.D.A respondents (Table 4.14). These findings could be related to low participation of respondents in health related programmes as mostly observed, the Salvation Army encourages its church members to participate actively in health promotion programmes, and hence a high turn out of respondents who are enlightened on issues of HIV and safer sex practices.

In terms of knowledge and marital status the study revealed that, two (100%) of respondents who are widowers had high knowledge on safer sex practices while, one (3%) of the married respondents had low knowledge on safer sex practices (Table 4.15). The findings could be attributed to male respondents regularly attending IEC sessions at the ART clinic, hence having adequate IEC and information on HIV preventive measures

as noted by unpublished findings in a study conducted by Hamwiibu (2008) while, the three percent married respondents who had low knowledge on safer sex practice on further examination was associated with high defaulter rates in terms of not attending IEC sessions, the findings were equally in agreement with Hamwiibu (2008) unpublished findings that, revealed (50%) of married PLHIV had inadequate IEC.

The study revealed that majority 49 (98%) of PLHIV had high knowledge on safer sex practices while, one (2%) of the respondents' had low knowledge on safer sex practices (Table 4.10), with mean knowledge of 4.9. The findings were in alignment with MoH and NAC (2010), reports which revealed that generally there was significant increase in knowledge on safer sex practices from (62.2%) in 2000 to (76.7%) in 2009. The high knowledge could be attributed to various factors such as high literacy levels in form of basic education as 33 (66%) of the respondents had been to primary school, 9 (18%) had reached secondary school and two (4%) were college graduates. The findings could be also associated with consistence in attending IEC sessions during each ART clinic visit. The findings could be a reflection of quality IEC provided to PLHIV by clinic staff and the result of this is compliance to the advice on adhering to safer sex practices. On the other hand, the one (2%) low knowledge is attributed to illiteracy levels of six (12%) noted among PLHIV making it impossible for them to understand basic facts related to HIV and associated preventive measures such as the use of condoms, abstinence and faithfulness.

## 5.2.2 Attitude Toward Safer Sex Practices

When the respondents were asked to give their opinion with regard to use of safer sex practices in determining their attitude toward these practices, majority of the respondents 37 (74%) said these were good as they promoted protected sex and faithfulness. In this study faithfulness meant sticking to one sexual partner and six (12%) said safer sex practices improve the quality of life (Table 4.16). These findings denote positive attitudes toward safer sex practices as a means of protecting oneself from HIV, and consequently increasing chances of compliance to the use of safer sex practices. One respondent said "these are good if one uses a condom as they protect us from getting infections", another

respondent said "these are good practices if one uses a condom and is faithful to one sexual partner". Still another respondent said "these are good as they protect us from death" and death meant HIV.

When quantitatively asked what the respondents would do if diagnosed with syphilis to protect their sexual partners from contracting the same infection, majority 37 (74%) of the respondents indicated they would go to the clinic for treatment, one (2%) indicated they would treat themselves with herbs and 10 (22%) indicated they would use a condom and two (4%) would tell their partners about the infection (Table 4.17). The findings revealed negative attitudes in that only 22% would use a condom, CSO (2007) in its ZDHS report noted that rural populations had less favourable attitude to the wife refusing to have sex or ask the man to use a condom in the presence of an STI, as only (86%) of rural women had a favourable attitude. The findings point to the fact that many PLHIV would have unprotected sex despite the presence of an STI which facilitates contracting and spread of HIV. The other findings were significant in that, the (74%) who would go to the clinic for treatment may not even reveal to their sexual partners that they have an infection pointing to the fact that there is no open communication in the homes of PLHIVs. The (2%) who would treat themselves using herbs is a reflection of how traditional practices are entrenched in the minds of the people. The effect of self treatment could lead to resistance hence, compromising the effectiveness of Anti-Retroviral Therapy. The response of using herbs was associated with illiteracy observed in table 4.3, as on further analysis the (2%) represented a female respondent who had only reached primary school, meaning the respondents ability to understand basic facts about HIV transmission and prevention was difficulty.

In considering the relationship between attitude and age using the quantitative responses, the study revealed that majority 11(100%) of the respondents in age group 21-34 had negative attitudes while, seven (27%) of the respondents in age group 25-48 had positive attitudes toward safer sex practices (Table 4.19). The negative attitude in age group 21-34 could be attributed to the fact despite more than half of the adult population supporting condom teaching to the youths (CSO, 2007), there are sections in the adult population who would not support teaching on the use of condoms and this could be the reason why PLHIV in this age group have negative attitudes toward safer sex practices. The other reason could be that with a couple which is HIV positive they would not see the reason why they should use condoms therefore, the need to protect each other does not arise, another reason is attributed to child bearing needs which are critical issues in an African society were children are seen as a symbol of wealth and who would continue with the legacy and name of the family.

Majority of the male respondents 15 (80%) had negative attitudes toward safer sex practices in comparison to eight (25%) of the female respondents who had positive attitudes toward safer sex practices (Table 4.20). It is appreciated that females had positive attitudes toward these practices however, the findings on either said were not impressive, they reflect that PLHIV have negative attitudes toward safer sex practices on the overall and therefore, this could explain why contracting of new viral strains was on the increase as noted by Collin (2008), that (10%) of married PLHIV reported new HIV strains after initial diagnosis.

In determining the relationship between attitude and education level, the study showed that majority two (100%) of the respondents who attained college education had negative attitudes toward safer sex practices and one (13%) who reached secondary had positive attitudes however, two (33%) of those who had never been to school showed positive attitudes toward safer sex practices (Table 4.21). These findings are significant in that education does not seem to play a role in influencing positive attitudes toward the use of safer sex practices. NAC (2009) postulates that "negotiating for safer sex practices such as condom use is more dependent on economic empowerment than education level". The statement suggests that attitude toward safer sex practices is economic bound, therefore a negative attitude may arise toward use of safer sex practices for the purpose of earning money especially for female PLHIV, another reason that could be attributed to negative attitude toward safer sex practices are socio-cultural influences, where a man is perceived to be right and economically sound, hence condom use is largely dependent on the male sexual partner than the female.

Majority five (100%) of respondents who were businesswomen had negative attitudes toward safer sex practices in comparison to two (22%) of respondents in other occupations (Table 4.22). The other results on the same table were equally profound as 26 (74%) of respondents who were peasant farmers also had negative attitudes and one (100%) of the respondents who were businessmen equally had negative attitudes toward safer sex practices. The findings could be associated with the wealth that the respondents usually have especially after harvesting of crops, where money is used to sell and buy sex. Wealth is reported to increase risk sexual behaviour as HIV prevalence increase with a rise in wealth quintile (CSO, 2007).

The relationship between attitude and religious denominations, revealed that majority three (100%) of the respondents from Pentecostal Assemblies had negative attitudes

toward safer sex practices while, one (10%) of the respondents from Seventh Day Adventist church had positive attitudes toward safer sex practices (Table 4.23). The results put religious denominations in the spotlight, in that message on safer sex practices are not emphasised in the church, NAC (2009), noted that churches will not preach safer sex practices such as condom use out side marriage as this was perceived as catalyst to not preventing the spread of HIV, in the same findings of NAC it was noted that conservative religious groups were associated with low condom use.

The relationship between attitude and marital status, revealed that majority six (86%) of respondents who were widows had negative attitudes toward safer sex practices and one (20%) of divorced respondents had positive attitudes toward safer sex practices (Table 4.24). A lot of factors could be attributed to this situation such as female dependency on males for a living and therefore, not able to suggest safer sex practices to their sexual partners. According to table 4.24 on page 45, majority of married PLHIV 23 (72%) had negative attitudes toward safer sex practices; this could be attributed to familiarity. NAC (2009) observed that majority of couples PLHIV included; acquire HIV infections from a spouse and this can be rightly said that even new strains of HIV are acquired from a spouse among PLHIV. The same report revealed that Multiple and Concurrent Sexual Partners (MCP) are seen as normal, this was exemplified when (12%) and (24%) of women and men were asked on MCPs respectively, it was reported that most men who are married have sex with their wives only but, that (21%) of new infections are estimated to occur in people in stable monogamy marriages, this means that there is significant HIV risk attributed to stable relationships due to dissatisfied sexual relations hence, MCPs of which some of them are PLHIV. The reports are in agreement with this study, as one female respondent among the married had a non-regular sexual partner. A non-regular sexual partner in this study was defined as a sexual partner met for the first time or occasionally meets without an ongoing sexual relationship.

Attitude toward safer sex practices had a total mean of 0.24, and majority of the respondents 39 (78%) had negative attitudes toward safer sex practices while, 11 (22%) had positive attitudes toward safer sex practices (Table 4.18 pg 41). When knowledge on safer sex practices was compared with attitude toward safer sex practices, majority 11

(100%) of the respondents with high knowledge had positive attitudes toward safer sex practices while, one (22%) of the respondents had low knowledge on safer sex practices had negative attitudes (Table 4.45). The positive attitude findings could be related to the fact that the, respondents with positive attitudes had attained basic education and were economically empowered in comparison to the (22%) who had negative toward attitudes safer sex practices, as on further analysis it was noted that the respondent was a female, who had never been school, a peasant farmer with little resources. Due to the respondent's socio-economic position, this could have made it impossible for the respondent to negotiate for safer sex practices, further compounded by the respondent's illiteracy which also make it impossible for the respondent to understand basic facts on safer sex practices, this was exemplified when asked to identify a safer sex practice, the respondent identified safer sex practices to mean "when one consults a traditional healer for protection".

Due to the differences in outcomes between quantitative and qualitative analysis on attitude toward safer sex practices, it made it difficult to clearly determine the respondent's attitude toward safer sex practices. However, the findings in quantitative analysis were adopted because of the significance of the responses and findings were used to determine the relationship of attitude toward safer sex practices to knowledge and sexual behaviour.

#### 5.2.3 Sexual Behaviour

When PLHIV were asked on what changes have taken place since they were diagnosed to be HIV positive and are on HAART in relation to their sexual behaviour, the study revealed that majority 19 (38%) of the respondents were using condoms while, 15 (30%) were faithful to their sexual partners and 16 (32%) were abstaining (Table 4.25). The results show that there is some change in the sexual behaviour of PLHIV; two female respondents openly said that "I sit down with my sexual partner and tell my partner that I am HIV positive despite my looks and use condoms". Studies have shown that Knowledge of HIV seropositivity are associated with adoption of less risky behaviors among PLHIV (Robert, 2009), therefore the findings are alignment with this study.

Majority 41 (82%) of the respondents when if they use condoms whenever having sex indicated YES while, nine (18%) indicated NO (Table 4.26). The use of condoms during sex is positive sign of change in sexual behaviour and this is attributed to the high knowledge on safer practices as demonstrated by findings in this study. However, the 18% who were not using condoms, were followed up and the reasons for not using condoms were as follows; six (67%) were "completely abstaining", however, one (11%) said "they did not get any sexual gratification when using condoms and that condoms were not reliable as they easily break', another one (11%) said "they wanted to have children" and another one (11%) said "at times condom were not available" (Table 4.2). The findings were in agreement with NAC (2009) findings that, despite scale up in the provision of condoms through out the country, the usage of condoms has not increased enough to impact significantly on HIV transmission. The findings could be related to socio-cultural factors, in an African society child bearing is a central feature, in a home where there is no child almost always the woman is threatened with divorce, this builds pressure on the female to desire to have a child to protect her marriage hence non use of condoms. Sexual enjoyment is desired by all and sex with a condom is believed not to be satisfying, a male respondent said "I do not get sexual gratification with when using condoms and they are not reliable" and further added that he heard this from others, therefore, he does not use them. The findings show that peer to peer influence has negative consequences; despite the high knowledge the respondent had on safer sex practices compliance was poor. On further analysis, on the male respondent's marital status, he was polygamous and the likelihood that he was infecting his wives and reinfecting himself with other new HIV strains was very high. Non availability of condoms at the health facility means that, either there is a short supply of the condoms and inability to promote female condoms. In as much PLHIV are willing to use condoms, condoms must be readily available and when condoms are referred to, it is usually male condoms, but emphasis must be placed on the supply and use of female condoms. Studies generally reveal that there is low promotion and utilisation of female condoms. In a report on long term use of female condoms in couples, Musamba (1998) noted that female condom utilisation was in sizable proportions of (10-40%) per coital episode, these findings show low utilisation of female condoms.

Condom use at last sexual intercourse revealed that, majority 35 (70%) of the respondents indicated YES while, 15 (30%) of the respondents indicated NO (Table 4.2). The (70%) condom use shows a positive stride in condom use among PLHIV however, the (30%) non condom use is quite significant, pointing to low condom use as observed by NAC (2009). The 30% respondents were followed up and two (13%) said that their sexual partners refused to use condoms, these responses were from a female respondents, the response boarders on socio-cultural factors as it believed that condom use must suggested by the male sexual partner, this undermines the ability of females to negotiate for safer sex practices. One (7%) of the respondents said they were not diagnosed to be HIV positive and only got to know of their HIV positive status after the death of the spouse (Table 4.29), this suggests that despite a major scale up of VCT services in the country, there are pockets of the population who have not taken an HIV test and efforts must be stepped to provide and transfer VCT services to household level.

The study revealed that majority of the respondents 34 (72%) when asked if they use condoms with their regular sexual partners indicated YES while, 16 (28%) indicated NO (Table 4.30), the (72%) condoms use with regular sexual partners is a positive stride in sexual behaviour change. This could be an indicator that PLHIV have an understanding on the need to have protected sexing the prevention of HIV nevertheless, (28%) of the respondents who said NO is vital to note, as this is indicative of lapses in consistency and gaps in sexual behaviour change. Such findings could help explain the presence of (10%) new HIV strain infections among PLHIV as reported by Collin (2008).

The study revealed that majority of the respondents 49 (98%) did not have non-regular sexual partners while, one (2%) of the respondents had non-regular sexual partners (Table 4.31), this was a female respondent who is married, reached primary education and a businesswoman, therefore, in view of respondents occupation this means that the respondent was exposed to high risk sexual behaviour and when further asked if she used condoms with her non-regular sexual partner she indicated YES (Table 4.32). The findings imply that sexual behaviour change in some PLHIV has not taken despite, them having high knowledge on safer sex practices and their importance in mitigating HIV

spread and therefore, the findings were in agreement with Gardner et al (2008) study, that some PLHIV were involved in high risk sexual behaviours.

The study revealed that majority 45 (90%) of the respondents were able to successfully negotiate for safer sex practices with their partners while, five (10%) were not able to negotiate for safer sex practices and all these were female respondents (Table 4.33). Out of the 10% who could not negotiate for safer sex practices, four (80%) had no sexual partners hence; they did not see the need to do so. One (20%) of the respondent indicated that their sexual partners refuse to negotiate for safer sex practices (Table 4.3), the findings were in alignment with NAC (2009) reports in it was said that the power to introduce condoms in a relationship is entirely in the hands of the man, therefore female PLHIV are disadvantaged and are more likely STIs and new HIV strains from their sexual partners

As alcohol abuse is one major contributing factor to increased sexual risk (NAC, 2009), the respondents were asked if they took alcohol. The study revealed that seven (14%) of the respondents took alcohol (Table 4.35), the major interest of this study was to find out how alcohol intake influences PLHIV sexual behaviour, the findings show that 86% of the respondents were engaged in low risk sexual behaviour. Low risk sexual behaviour in this study was defined as a sexual behaviour which does not expose the individual to contracting or spreading of HIV by using condoms, been faithful to one sexual partner and practicing abstinence. One (14%) of the respondents directly said I have protected sex (Table 4.36). The results are a rare occurrence as alcohol intake is associated with impaired judgment, CSO (2007) reports that sexual intercourse when one or both partners are under the influence of alcohol is more likely to be unplanned, and couples are less likely to use condoms. These findings are therefore, in contradiction with the observation made CSO.

When asked if HAART medication has an effect in influencing PLHIV sexual behaviour. The study revealed that, majority 22 (44%) of the respondents said that they have one sexual partner while, 12 (24%) of the respondents said they have protected sex with their regular sexual partners (Table 4.37). The reason for having protected sex was that "I am

HIV positive" one respondent said, another female respondent said "We use condom with my husband and if we can not agree on using condoms then we abstain". Another 12 (24%) said they were abstaining and the reason for abstaining was that "I did not want to spread the infection to others" one respondent said. The findings dispel the fears that PLHIV on HAART will be engaged in high risk sexual behaviour, therefore, the results were in contradiction with Hong and Chhea (2005) who postulated that PLHIV on HAART could involved in high risk sexual behaviours and was alluded to improved quality of life and hence lead to further spread of the infection. With such findings, this could be one of the explanations why HIV prevalence has fallen to (14.3%), (CSO, 2007). Further the findings, suggest that PLHIV have an understanding that even though they are on treatment they were still HIV positive and will transmit the infection to others, the finding was in agreement with Chakrapani et al, 2007 study in which it was noted that PLHIV took personal responsibility in protecting their sexual partners as they were still HIV positive.

Comparison of sexual behaviour and age groups revealed that, majority five (83%) of respondents in age group 49-62 had satisfactory sexual behaviours while, five (46%) of respondents in age group 21-34 had unsatisfactory sexual behaviours (Table 4.39). The results show that the older one becomes the less sexually active they become and tend not to engage themselves in risky sexual behaviour, on the other hand the age group 21-34 is the most youthful, sexually active and engage in risky sexual behaviours, the findings are in alignment with the HIV prevalence estimates which stand at (16.1%) in females between 15 to 45 years and an overall rural prevalence of (10.3%) (CSO, 2007).

The relationship between sexual behaviour and gender was determined and the study revealed that, majority 17 (94%) of the male respondents had satisfactory sexual behaviours while, 12 (38%) of the female respondents had unsatisfactory sexual behaviours (Table 4.40). The results could be attributed to that fact more males had attained some good form of education, as two (100%) of the male respondents had reached college education while, five (83%) of the female respondents had never been to school. The other reason could be attributed to vulnerability of women as they a

marginalised; they are not economically empowered and tend to be male dependent for their survival.

The relationship between sexual behaviour and level of education revealed that, majority two (100%) of the respondents who had college education had satisfactory sexual behaviours while, three (60%) of the respondents who never had been to school had unsatisfactory sexual behaviours (Table 4.41). The findings above indicate that, PLHIV who are educated are likely to be engaged in less risky sexual behaviour than those who have not received any form of education. The findings means that literacy brings about an understanding of safer sex practices and PLHIV can easily modify their sexual behaviour compared to the illiterate who find it difficult to understand health messages on safer sex practices, NAC (2009) report on National HIV Prevention Convention revealed that, education does not seem to have a role in sexual behaviour change therefore, the findings in this study conflict with NAC findings.

The relationship between sexual behaviour and occupation revealed that, the majority four (100%) of the respondents who were businessmen had satisfactory sexual behaviours while, one (20%) of businesswomen had unsatisfactory sexual behaviours (Table 4.42). On analysis the businesswoman had a non-regular sexual despite her been married hence, an unsatisfactory sexual behaviour. The findings indicate that certain occupations such as doing business, which involve travelling to other destinations, expose PLHIV to entering into risky sexual behaviours. Among the main drivers of HIV are Multiple and Concurrent Sexual Partners (NAC, 2009) therefore, the findings in this study are in agreement with NAC reports.

Sexual behaviour and religious denomination relationship revealed that, majority three (100%) of respondents who were from Pentecostal Assemblies had a satisfactory sexual behaviours while, four (40%) of respondents who were from S.D.A had unsatisfactory sexual behaviours (Table 4.43). The findings could be related to teachings on high standards of morality thereby, impacting positively on sexual behaviour, on the other hand the unsatisfactory sexual behaviour could also be related to personalities of individuals. The general stance taken by some churches in not addressing sexual

behaviour matters adequately and not promoting condom use in any other relationship except in a marriage setting could another contributing factor to unsatisfactory sexual behaviour among church members. Churches perceive promotion of safer sex practices such as condom use as contributing factors to promiscuity among church members (NAC, 2009); therefore the findings in this study are in agreement with NAC.

The relationship between sexual behaviour and marital status revealed that, majority two (100%) of widowers had satisfactory sexual behaviours while, two (6%) of married respondents unsatisfactory sexual behaviours (Table 4.44). The findings of satisfactory sexual behaviour among widowers could be attributed to them practicing abstinence while, the unsatisfactory sexual behaviour could be associated with failure to negotiate for safer sex practice and not using condoms during sexual intercourse, the (6%) unsatisfactory sexual behaviour was all linked to married female respondents, who also had negative attitudes toward the use of safer sex practices. CSO, 2007 reports that, (90.3%) of married women would refuse to have sexual intercourse or ask for condom, meaning there is about (9.7%) who would have sexual intercourse of or not ask for condoms and this was associated with failure to negotiating safer sexual relations with husband, therefore the findings in this study are in agreement with CSO findings.

The study revealed that, majority of the respondents 37 (74%) had satisfactory sexual behaviours while, 13 (26%) of the respondents had unsatisfactory sexual behaviours (Table 4.38). The total mean for sexual behaviour was 5.3. The findings of satisfactory sexual behaviours, could be attributed to high knowledge on safer sex practices as 37 (100%) of the respondents with high knowledge on safer sex practices had satisfactory sexual behaviours while, one (8%) of respondents with low knowledge on safer sex practices had unsatisfactory sexual behaviours (Table 4.47). Further analysis of the respondents with unsatisfactory sexual behaviours, 12 (92%) were females of which 27 (67%) had been to primary school and five(33%) had never been school, (75%) of them had negative attitudes toward safer sex practices despite, them having good knowledge on safer sex practices as only two (8%) had low knowledge on safer practices. The results were in agreement with a study conducted by Gardner et al (2008) in which it was indicated that there was an improvement in sexual behaviour indicators among PLHIV,

as they had reduced their sexual risk behaviours after they learnt of their seropositive status nevertheless, some were still engaged in sexual behaviours that would transmit HIV to others.

# 5.3 Implications to the Health Care System

# 5.3.1 Implications to Nursing Practice

The findings in this study revealed that 39 (78%) (Table 4.18) of the respondents had bad attitudes toward safer sex practice despite, the majority of respondents having high knowledge on safer sex practices. This implies that there is need to tailor health education messages directed at influencing attitudinal changes and that health care providers, in particular nurses should be equipped with excellent teaching and counseling skills to meet this challenge.

# 5.3.2 Implications to Nursing Administration

There is need for requires Nurse administrators/managers to be in the forefront, advocating for quality IEC provision through training of nursing staff on latest developments in HIV infection and prevention strategies.

# 5.3.3 Implications to Nursing Education

Even though the majority 49 (98%) of respondents had high knowledge on safer sex practices (Table 4.10). The one (2%) of respondents who had low knowledge on safer sex practices. Therefore, there is need to deliberately strengthen the health education component on the curriculum for nurses, so that nurses will be competent enough to provide quality and effective health information, as it patterns to safer sex practices and HIV prevention.

# 5.3.4 Implication to Nursing Research

In a world that is changing so fast, there is need for new information and knowledge that will assist in providing quality health care to patients/clients. The nurse is therefore, required to fully participate in research on HIV and its prevention, the type of researches to be conducted will need to focus on all facets of life such as social, cultural, religious

and service related researches that will help to generate a wealth of knowledge for nursing, that will facilitate provision of evidenced based Information Education and Communication

#### 5.4 Conclusion

The purpose of the study was to determine Sexual Behaviour of People Living with HIV on HAART both male and female at Chikankata Mission Hospital's ART Clinic. Both quantitative and qualitative study designs were used.

The results of the study provide a platform to adequately address the challenges of HIV and to further help relevant authorities to generate policies and interventions aimed at mitigating the spread of HIV, reinforce sexual behaviour messages for both the PLHIV and the entire Zambian community.

The study revealed that PLHIV have high knowledge on safer sex practices, this is exemplified by the majority of the respondents been able to point out what safer sex practices are and highlighted condom use as a major safer sex practice including faithfulness and abstinence. A few of the respondents indicated consulting a traditional healer for protection from HIV. There is need to adequately involve traditional healers, in spreading information on safer sex practices as the nation has put up a spirited fight against HIV.

The study revealed that majority of the respondents had negative attitudes toward safer sex practices despite, them having high knowledge on safer sex practices. The findings have been associated with social, economic and cultural factors, inability to negotiate for safer sex practices and cultural demands such as the need to have a child. There is need to tailor messages that will influence attitudinal changes toward the use of safer sex practices.

The study revealed that, majority of the respondents had satisfactory sexual behaviours, however, there some PLHIV who are involved in risky sexual behaviours. The risky sexual behaviours were all associated with failure to negotiate for safer sex practices, and negative attitudes toward the use of safer practices, social and cultural factors such as illiteracy, failure to negotiate for safer sex practices, as the power to introduce condoms for instance is perceived to be the responsibility of the male sexual partner.

This study revealed that, there is some change in the sexual behaviour of PLHIV secondary to high knowledge, even though there are some PLHIV whose sexual behaviour has not changed due to negative attitudes toward safer sex practices. Change in sexual behaviour, among PLHIV boarders on a lot of cross cutting issues such as social, economic, cultural factors and peer to peer related factors. To observe change in sexual behaviour, it requires extra effort from the PLHIV themselves. Change in sexual behaviour must be learnt and PLHIV have to go through stages of change and achieve a sustained changed sexual behaviour. One of the ways to achieve this is by promoting one on one IEC sessions with health care providers.

#### 5.5 Recommendations

#### 5.5.1 Chikankata Mission Hospital

- a. There is need for ART clinic staff at Chikankata Mission Hospital to undergo a special training in IEC provision and counseling. This will enable the staff to have one to one IEC sessions with PLHIV to find out how they are coping with HIV prevention measures and treatment. This will help in noting gaps and develop workable solutions with PLHIV in mitigating the spread of HIV.
- b. There is need for members of the community to be given equal chances to participate in health care programmes. It was noted that PLHIV from other religious denominations had unsatisfactory sexual behaviours in comparison to those from the Salvation Army therefore; Chikankata Health Services needs to cast its net wide to capture all member of the community who equally need IEC on sexual behaviour.
- c. There is need for Chikankata Mission Hospital VCT services to be fully rolled out to community and household level and strengthen Couple Counseling and Testing. The Health Medics need to be enabled to carry out VCT at these levels and the VCT outreach programmes needs be designed to reach every community. This recommendation comes as a result of noting

that some respondents only got to know about their HIV seropositive status after their spouses were dead.

## 5.5.2 Ministry of Health

- a. There is need to carry out other studies such as the presence of STIs among PLHIV to help define the context and inconsistencies of condom use among PLHIV.
- b. There is need for deliberate effort by Government through the Ministry of Health, National AIDS Council and other stakeholders to develop a National Policy on Safer Sex Practices. The document will serve as guide to health care providers in the provision of quality IEC to PLHIV and the general public.
- c. There is need for integration of HIV prevention into HIV care and treatment programs through behavioral interventions and provision of methods for prevention and intensive counseling on sexual risk reduction for HIV.

# 5.5.3 Other Line Ministries, Statutory Bodies

- a. There is need for the Ministry of Education, Ministry of Gender and Development and other stakeholders such as Forum for African Women Educationalists of Zambia, to deliberately step up their efforts in encouraging parents/guardians to afford the girl child quality education, as a literate girl child will have access to information including HIV/AIDS.
- b. There is need for PLHIV to be economically empowered and Government agencies such as the Citizenship Economic Empowerment Commission need to hold seminars with PLHIV on business development and entrepreneurship. An economically empowered PLHIV especially female PLHIV will be less dependent on males for their livelihood, as they would have resources to meet their needs and hence less involved in risky sexual behaviours.

#### 5.5.4 Non-Governmental Organisations

a. There is need to promote condom use among PLHIV especially female condoms. Currently there is little promotion on the availability and use of female condoms Female condoms can be an effective tool in halting the spread of HIV therefore organisations such as Society for Family Health, NZP+ and Treatment Advocacy Literacy Campaign should take up the challenge of promoting female condoms among PLHIV.

#### 5.6 Dissemination of Findings

The results in this study will disseminated to ART clinic staff at Chikankata Mission Hospital by issuing an abstract of this study to the clinic; information also given out by making use of the clinical meetings held at the hospital. Further the research report will be reproduced and copies distributed to the Ministry of Health, University of Zambia library, Department of Nursing Sciences and Chikankata Mission Hospital library.

## 5.7 Limitations of the Study

The limitations of the study were as follows:

- a. The study did not elicit information on the presence of Sexually Transmitted Infections among PLHIV; there is therefore need for a study to ascertain presence of STIs among PLHIV as would help to measure sexual behaviour change among PLHIV.
- b. The study did not establish whether or not PLHIV have sexual relations with fellow PLHIV or not, this would have been helpful in assessing HIV infection rate among HIV negative persons.
- c. The study did not establish the use of female condoms among PLHIV.
- d. During qualitative and quantitative analysis of the attitude of PLHIV toward safer sex, it was not clearly defined as both analyses brought out two different results, qualitative results showed positive attitude while, quantitative results showed negative attitude toward safer sex practices.

- e. One of the limitations of the study was its sensitivity, as it bordered on very personal information from the respondents and because of this the respondents could have not given accurate information.
- f. The other constraint noted was the respondents were mainly using vernacular (Tonga) and this needed some translation of questions and find appropriate phrases and words so as not cause harm to the respondents and consequently these might have affected the interpretation of results.

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# Appendix I

## THE UNIVERSITY OF ZAMBIA

## **SCHOOL OF MEDICINE**

# DEPARTMENT OF NURSING SCIENCES

# SEMI-STRUCTURED QUESTIONNAIRE

TOPIC: SEXUAL BEHAVIOUR OF PLHIV ON HAART IN CHIKANKATA, MAZABUKA

DISTR	ICT
DATE	OF INTERVIEW:
PLAC	E OF INTERVIEW:
NAME	OF INTERVIEWER:
SERIA	AL NUMBER:
INSTE	RUCTIONS TO INTERVIWER
1.	Introduce yourself to the respondent
2.	Explain the purpose of the interview
3.	Get written consent from the respondent
4.	Reassure the respondent that all responses will be held in strict confidence and that no
	name will appear on the interview schedule
5.	Ensure that all questions are answered and indicate response by ticking in the appropriate
	space e.g. ( ) or filling in the spaces provided e.g

6. Thank the respondent at the end of each interview

# **SECTION A: DEMOGRAPHIC**

What was your age at your last birthday	?
2. Gender	
a) Female	( )
b) Male	( )
3. What is your highest level of education	?
a) Never been to school	( )
b) Primary	( )
c) Secondary	( )
d) College	( )
e) University	( )
4. What is your occupation?	
a. Peasant farmer	( )
b. Businessman	( )
c. Businesswoman	( )
d. Other specify	
5. What is your Religious Denomination?	•
a. Salvation Army	( )
b. Pentecostal Assemblies	( )
c. United Church of Zambia	( )
d. Roman Catholic	( )
e. Seventh Day Adventist	( )
f. New Apostolic Church	( )
g. Jehovah's Witness	( )
h. Other specify	
6. Marital status	•
a. Single	( )
b. Married	( )
c. Divorced	( )

d. Widow	( )
e. Widower	( )
f. Separated	( )
SECTION B: KNOWLEDGE ON SAFER SEX P	PRACTICES
7. How is HIV transmitted?	
a. Mosquito bite	()
b. Unprotected sexual intercourse	( )
C. Silaring or a series	()
d. Other specify	
8. How can one protect himself/herself from co	ntracting HIV?
a. By using condoms	( )
b. By sleeping under a mosquito net	( )
c. Taking a bath after sexual intercourse	()
d. Other specify	
9. What do you understand by safer sex pract	tices?
a. These are methods to protect oneself fi	rom contracting HIV ( )
b. When one practices sexual cleansing	( )
c. When one has sex with children	( )
d. When one consults traditional healers	for protection ( )
10. Which one below is a safer sex practice?	
a. Washing of genital organs before sexu	nal intercourse ( )
b. Using herbs before sexual intercourse	()
c. Using a condom	( )
d. Sticking to one sexual partner	( )
11. What is abstinence?	
a. Not eating food	( )
b. No indulgence in any sexual activity	( )
c. Having multiple sexual partners	( )

12. What is being faithful?	_	
a. Supplying family needs ( )		
b. Sticking to one faithful sexual partner ( )		_
c. Coming home early ( )	)	
SECTION C: ATTITUDES TOWARDS SAFER	SEX PRACTICES	
13. What is your opinion with regard to use of	safer sex practices?	
	t and to protect your sexual	
14. If found with an STI such as syphilis, wha	t would you do to protect your sexual	
partner?		_
a. I would go to the clinic		
b. I would use a condom		L
c. I would tell my partner		
d. I would treat myself with herbs	( )	
SECTION D. SEXUAL BEHAVIOUR		
15. In what ways have you changed your sexu	ual behaviour since you where diagnosed to be	
HIV positive and you are now on HAAR?		
a. I use condoms whenever having sex	( )	ſ
b. I am faithful to my sexual partner	()	
c. I am practicing abstinence	( )	
d. I have reduced on the number of sexual		
e. Other specify		

16.	Do you use condoms when	never you have sex?	
a.	Yes	( )	
b.	No	( )	
17.	If No to question 16, pleas	se explain.	
18.	At your last sexual interco	ourse did you use a condom?	
	Yes	( )	
b	. No	( )	
19.	If NO to question 18, plea	ase explain.	
20.	Do you use condoms with	h your regular sexual partner?	
a	. Yes	( )	
	o. No	( )	L
21	. Apart from your regular	sexual partner, do have other sexual partner (s)	
	a. Yes	( )	
ł	o. No	( )	
22	. If YES to question 21, d	o you use condoms with these sexual partner (s)	
	a. Yes	( )	
1	b. No	()	L
23	Do you negotiate for saf	er sex practices with your sexual partner?	

	a. b.	Yes NO	()	
		o question 23, what are the reasons ur partner?	s for not negotiating for safer sex practices	
a.	I feel	shy to negotiate for safer sex prac	tices ( )	
b.	Му р	artner does not want to negotiate	()	
c.	I fear	to be rejected	()	
d.	I trus	t my partner	( )	
e.	Other	r specify		
25. I	Οο γοι	ı take alcohol?		İ
a.	Yes		( )	
b.	No		( )	
		nce of alcohol?	ribe your sexual behaviour when under the	
	•••••			
27.		has the taking of HAART influence		
•				
•				

THANK YOU FOR YOUR PARTICIPATION

Appendix II

Questionnaire Marking Key

Section B. Iknowie age			Section C: Attitude toward safer sex practices			Section D: Sexual behaviour		aviour
Question Number	Correct Answer	Mark	Question Number	Correct Answer	Marks	Question Number	Correct Answer	Marks
8	A	1	14	В	1	15	A,B, C or D	1
9	A	1				16	A	1
10	C or D	1				18	A	1
11	В	1				20	A	1
12	В	1				21	В	1
						22	A	1
						23	A	1
	-					24	A,B,C,D or E	0
TOTAL		5			1			7

## Appendix III

### WORK PLAN

TASK TO BE	PERSONNEL		PERSONAL
PERFORMED	ASSIGNED TO	DATES	DAYS
	TASK		REQUIRED
Literature review	Researcher &	Continuous	Continuous
	supervisor		
Finalisation of	Researcher	31 <sup>st</sup> May to 23 <sup>rd</sup>	60
research report		Aug 2010	
Clearance from	Researcher	30 <sup>th</sup> Aug to 10 <sup>th</sup>	14
authority		Sept 2010	
Pilot study	Researcher	13 <sup>th</sup> Sept to 17 <sup>th</sup>	5
		Sept 2010	
Data collection	Researcher	11 <sup>th</sup> Oct to 1 <sup>st</sup>	15
		Nov 2010	
Data analysis	Researcher &	8 <sup>th</sup> Nov to 10 <sup>th</sup>	32
-	supervisor	Dec 2010	
Report writing	Researcher	10 <sup>th</sup> Dec to 21	11
		Jan 2010	
Submission of	Researcher	17 <sup>th</sup> Jan to 11 <sup>th</sup>	20
draft report to		Feb 2010	
DNS			
Finalising of	Researcher	7 <sup>th</sup> Feb to 5 <sup>th</sup> Mar	24
report		2010	
Monitoring and	Researcher	Continuous	Continuous
evaluation			
Dissemination of	Researcher	14 <sup>th</sup> to 25 <sup>th</sup> Mar	. 10
results		2010	

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dix
pen
<u> </u>

					City	CFPT	OCT	NOV	DEC	JAN	FEB		MAR	
MONTHS		~	Z Z	JULY		-+		1 2 3 4	1 2 3 4	1 2 3	1	2 3 4	1 2	3 4
No of weeks per month	month	1 2 3	4 1 2 3	4 1 2 3 4	t c 7 1	7	1		_					
Task to be	Person													
performed	responsible													
Literature	Researcher &									1			1	-
review	supervisor													
Compiling	Researcher													
research														
proposal														
Clearance	Researcher					1								
from school														
Pilot study	Researcher													
Data	Researcher						1							. <u> </u>
collection														
Data analysis	Researcher &							1	1					
	supervisor													
Report	Researcher													
writing														
Draft report to	Researcher											<b>A</b>		
DNS														
Finalisation of	Researcher											<u> </u>		
report														
Monitoring &	Researcher	%												
evaluation	supervisor													I
Dissemination	researcher													•
of results												-	1	
						. <u>×</u>								

### Appendix V

## RESEARCH BUDGET

ITEM	UNIT	U	NIT COST (K)	TOTAL COST (K)
STATIONERY				
Reams of paper	3		35,000	105,000
Pencils	1 box		15,000	15,000
CHCHS	1 box		20,000	20,000
T CIIS	2		5,000	10,000
Rubber	5		10,000	50,000
Note books	1	$\top$	20,000	20,000
Tipex	1	+	25,000	25,000
stapler C. L. Later	1	+	100,000	100,000
Scientific Calculator	1 box	$\top$	10,000	10,000
Staples	4		8,000	32,000
Highlighters markers Big envelopes	5		5,000	25,000
	1		15,000	15,000
Bo stick	1		100,000	100,000
Memory stick		_	80,000	80,000
Diary		5	5,000	25,000
Manila paper		5	5,000	25,000
Transparent		5	2,000	10,000
Spirals		i T	300,000	300,000
Field bag		2	50,000	100,000
Flip charts Makers		4	6,000	24,000
Makers			Subtotal	1,091,000
SECRETARIAL SERVICES		_	4.000	40,000
Questionnaire typing	1	0	4,000	
Research proposal typing	40 pages	_	4,000	
Research report writing	70 pages	_	4,000	
Research report photocopying	6*70 (350) pages		3,000	
Questionnaire printing	10*50 (500)pages	_	3,000	7.50.000
Binding of research report		6	60,000	2,040,000
			Subtotal	2,040,000
PERSONNEL				
Transport allowance during research		15	10,000	150,000
activities		15	50,000	750,000
Lunch allowance		50	5,000	250,000
Snacks for respondents			Subtotal	1,150,000
INFROMATION				
DISSEMINATION				200.000
Hire of hall for Dissemination		1	300,00	1.50.000
LCD hire for dissemination		1	150,00	
Refreshments		20	20,00	0 400,000
Refresimients			Subtotal	850,000 5,131,000
			TOTAL	5,131,000
			CONTINGENCY 10%	513,500
GRAND TOATL			23/7	5,644,500

### Appendix VI

#### **BUDGET JUSTIFICATION**

The budget for this project has been divided into four sections. The sections are; stationary, secretarial services, personnel allowances and information dissemination. There is a 10% contingency fund which is also added to the grand total.

### Stationary

The research project requires stationary that will be used in the generation of tools for the study which will need to be stapled and placed in large envelopes and kept in the field bag. Other stationary materials which will be required are staples, flips charts, highlighter makers, markers and large envelopes. There will be need for printing of draft copies of the research report, which will require plain papers and binding materials for presentation to the Research Supervisor.

#### Secretarial Services

The research tools will need to be typed professionally, printed and photocopied for 50 respondents. The research final report will need to be professionally typed and bound and reproduced into copies that will be distributed to The University of Zambia Library, the Department of Nursing Sciences in the School of Medicine, Ministry of Health, Chikankata Mission Hospital and one copy for the author.

#### Personnel

The researcher will be required to travel from Lusaka to the study site to conduct the study and will need to travel to see the Research Supervisor for clarifications in the course of carrying out the study. It is anticipated that the researcher will spend most of the time in the ART Clinic collecting data from respondents and some respondents may stay over lunch time, therefore there will be need to provide a snack for both the researcher and respondents during this period.

## Information dissemination

The findings of the research will need to be disseminated to the staff and managers of the ART Clinic and Chikankata Mission Hospital Management. The dissemination of information will be in form of a workshop and twenty participants will be invited. There will be need therefore; to

hire a hall and projecting equipment for this purpose and purchase some refreshments for would be participants.

## 10% contingency of total budget

The 10% contingency funding derived from the total project cost is meant to cushion unforeseen expenses during the course of the research and it also takes into account inflationary changes.

### **Appendix VII**

The University of Zambia

School Of Medicine

Department Of Nursing Sciences

P.O. Box 50110

Lusaka

Zambia.

The Medical Officer In-Charge

Mazabuka District Hospital

Mazabuka

UFS: The Head of Department

School of Medicine

Department of Nursing Sciences

P.O Box 50110

Lusaka

Dear Sir/Madam,

## RE: PERMISSION TO UNDERTAKE PILOT STUDY

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

I am hereby requesting for permission from your office to undertake a pilot study at your Hospital on the Sexual Behaviour among People Living with HIV. Data will be collected commencing October, 2010. The pilot will be conducted in the Medical Clinic.

Your assistance will be greatly appreciated.

Yours faithfully,

Chintingiza Samuel- Computer Number 28058917

The University of Zambia
School Of Medicine

Department Of Nursing Sciences

P.O. Box 50110

Lusaka

Zambia.

4<sup>th</sup> October, 2010

The Medical Officer In-Charge

Mazabuka District Hospital

Mazabuka

UFS: The Head of Department

School of Medicine

Department of Nursing Sciences

P.O Box 50110

Lusaka

Dear Sir/Madam,

Aligna

### RE: PERMISSION TO UNDERTAKE PILOT STUDY

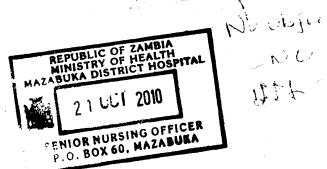
I am a fourth (4) year student pursuing a Bachelor of Science in Nursing Degree at the above mentioned Institution. I am expected to carry out a research study as part of the requirements for the fulfillment of the Degree in Nursing.

I am hereby requesting for permission from your office to undertake a pilot study at your Hospital on the Sexual Behaviour among People Living with HIV. Data will be collected commencing October, 2010. The pilot will be conducted in the Medical Clinic.

Your assistance will be greatly appreciated.

Yours faithfully,

S-Chinhagian Chintingiza Samuel- Computer Number 28058917



### **Appendix VIII**

## THE UNIVERSITY OF ZAMBIA

## SCHOOL OF MEDICINE

## DEPARTMENT OF NURSING SCIENCES

Telephone: 252641

P.O. Box 50110

Telegram: UNZA, LUSAKA

Lusaka

Telex: UNAZALU ZA 44370

Zambia

Fax: +260-1-250752

E-mail: pbn@coppernet.zm

20<sup>th</sup> August, 2010

The Development Director

Chikankata Mission Hospital

Private Bag S-2

Mazabuka.

UFS: The Head - Department of Nursing Sciences

School of Medicine

Department of Nursing Sciences

P.O Box 50110

Lusaka.

Dear Sir.

# RE: PERMISSION TO CONDUCT A RESEARCH STUDY

I am a fourth (4) year student pursuing a Degree programme in Nursing at the above mentioned school. As part of the course requirements I am to undertake a research project. It is for this reason that I write to seek permission to undertake the study at Chikankata Mission Hospital. The title of the study is "Sexual Behaviour among People Living with HIV (PLHIV) on HAART". The study will be done at Chikankata Mission Hospital in the ART Clinic. I intend to do my study in the month of October, 2010.

It is my hope that the findings will help in improving the health education package to PLHIV in promoting behaviour change and promote the use of safer sex practices in the prevention of the contracting and spread of HIV and STIs among PLHIV.

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

Yours faithfully,

Chintingiza Samuel, Student DNS

### THE UNIVERSITY OF ZAMBIA

### SCHOOL OF MEDICINE

#### DEPARTMENT OF NURSING SCIENCES

Telephone: 252641

P.O. Box 50110

Telegram: UNZA, LUSAKA

Lusaka

Telex: UNAZALU ZA 44370

Zambia

Fax: + 260-1-250752

E-mail: pbn@coppernet.zm

20<sup>th</sup> August, 2010

The Development Director

Chikankata Mission Hospital

Private Bag S-2

Mazabuka.

UFS: The Head - Department of Nursing Sciences

School of Medicine

Department of Nursing Sciences

P.O Box 50110

Lusaka.

Dear Sir,

### RE: PERMISSION TO CONDUCT A RESEARCH STUDY

I am a fourth (4) year student pursuing a Degree programme in Nursing at the above mentioned school. As part of the course requirements I am to undertake a research project. It is for this reason that I write to seek permission to undertake the study at Chikankata Mission Hospital. The title of the study is "Sexual Behaviour among People Living with HIV (PLHIV) on HAART". The study will be done at Chikankata Mission Hospital in the ART Clinic. I intend to do my study in the month of October, 2010.

It is my hope that the findings will help in improving the health education package to PLHIV in promoting behaviour change and promote the use of safer sex practices in the prevention of the contracting and spread of HIV and STIs among PLHIV.

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

S-Chinhagia Chintingiza Samuel, Student DNS Appendix XI

INFORMED CONSENT

Dear Participant,

My name is Chintingiza Samuel; I am a student pursuing a Bachelor of Science in Nursing Degree in the Department of Nursing Sciences at the School of Medicine, University of Zambia.

In partial fulfillment of the Degree of Bachelor of Science in Nursing, I am required to undertake a research project. My study topic is Sexual Behaviour among PLHIV who are on HAART.

You have been randomly selected to participate in this study and I wish to inform you that participation in this study is voluntary and you are free to withdraw at any stage of the study if you so wish. You will be asked questions about sexual behaviour, knowledge on safer sex practices and attitude towards safer sex practices. Any information you will give me will be kept confidential and no name will be written on the interview schedule.

You will not receive direct benefits from the study or monetary gain. This information you will give me will help to develop health education package on the need to modify sexual behaviour and utilisation of safer sex practices among PLHIV. It will also be used by health planners and organisations to promote sexual behaviour change and use of safer sex practices.

For any clarification you may contact the Head of Department Nursing Sciences on telephone
number +260 211 252641
Ihereby called the participant understands the guidelines of this study and I am willing to participate in the study.
Dated thisday of2010
Signature/thumb print of respondent
Signature of interviewer