

**FACTORS ASSOCIATED WITH DELAYED ENTRY INTO HIV MEDICAL  
CARE AMONG HIV POSITIVE PEOPLE WHO ARE AWARE OF THEIR  
STATUS IN BULAWAYO ZIMBABWE**

by

Tasara Makasi

submitted in accordance with the requirements  
for the degree of

**Master of Public Health**

at the

University of South Africa

Supervisor: Dr LM Modiba

June 2012

Student Number: 35135646

## DECLARATION

I declare that **FACTORS ASSOCIATED WITH DELAYED ENTRY INTO HIV MEDICAL CARE AMONG HIV POSITIVE PEOPLE WHO ARE AWARE OF THEIR STATUS IN BULAWAYO ZIMBABWE** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



Tasara Makasi

June 2012

# **Factors associated with delayed entry into HIV medical care among HIV positive people who are aware of their status in Bulawayo Zimbabwe**

STUDENT NUMBER: 35135646  
STUDENT: TASARA MAKASI  
DEGREE: MASTER OF PUBLIC HEALTH  
DEPARTMENT: HEALTH STUDIES, UNIVERSITY OF SOUTH AFRICA  
SUPERVISOR: DR LM MODIBA

## **ABSTRACT**

Using non-experimental descriptive exploratory survey, this study sought to find out factors associated with delayed entry into HIV medical care among HIV positive people who are aware of their status. A quantitative design was used and a structured questionnaire was used as the data collection instrument. Respondents were patients in a hospital's Opportunistic Infection Department whose hospital records indicated that they were HIV positive during the time of the study.

The study found out that as much as 71.6% (n =43) first entered HIV medical care more than 12 months after testing HIV positive while 40% (n = 24) did so as a result of illness. Low education levels, unemployment and being single are associated with delayed entry into HIV medical care. A percentage of the population uses and trusts non-biomedical approaches to dealing with HIV/AIDS. Being diagnosed HIV positive is therefore not necessarily a strong reason enough for one to immediately enter into medical care. Intensive health education needs to be done at work places, health facilities, schools, through print and electronic media, churches and other community settings to equip the population with knowledge of the advantages of early entry into HIV care.

## **KEY CONCEPTS**

Delayed presentation, Acquired Immune Deficiency Syndrome, Antiretroviral Therapy, HIV sero-positive, predictors of delayed presentation, coping mechanism, stigma, sexual partner, predictors for seeking treatment, HIV testing.

## ACKNOWLEDGEMENTS

I am deeply grateful to my Heavenly Father for all the strength and help as I was working through this project.

I would like to thank the following persons for their invaluable support and unending encouragement.

- My supervisor, Dr LM Modiba, for being there for me all the way through.
- Mpilo Hospital staff and management
- My wife Shamiso, for her constant encouragement
- Dr Khumbulani Mdletshe, for the support and encouragement he gave me.
- Karen, Anesu and Tapiwa my children, for sacrificing the precious we could have spent together
- The respondents for sharing their time despite the fact that a lot of them were in pain.
- University of South Africa's English Department for critically and professionally editing the manuscript.

<b>TABLE OF CONTENTS</b>	<b>Page</b>
--------------------------	-------------

## **Contents**

1.1 INTRODUCTION.....	1
1.2 BACKGROUND TO THE STUDY.....	2
1.3 PROBLEM STATEMENT.....	3
1.4 AIM OF THE STUDY .....	4
1.4.1 Research questions .....	4
1.5 OBJECTIVES OF THE STUDY.....	5
1.6 ASSUMPTIONS.....	5
1.7 SIGNIFICANCE OF THE STUDY.....	5
1.9 RESEARCH DESIGN AND METHODOLOGY.....	6
1.10 POPULATION AND SAMPLE .....	7
1.11 DATA COLLECTION .....	8
1.12 DATA ANALYSIS .....	8
1.13 RELIABILITY AND VALIDITY .....	8
1.14 DEFINITION OF TERMS .....	9
1.15 SCOPE.....	10
1.16 LIMITATIONS.....	10
1.17 ETHICAL CONSIDERATIONS.....	10
1.18 OUTLINE OF THE STUDY.....	10
1.19 CONCLUSION.....	11
CHAPTER 2.....	12
LITERATURE REVIEW.....	12
2.1 INTRODUCTION .....	12
2.1.2 Definition of late presentation.....	12
2.3 Benefits of Early presentation.....	13
2.4 HIV/AIDS IN ZIMBABWE .....	14
2.4.1 HIV AIDS prevalence in Zimbabwe.....	14
2.4.2 HIV/AIDS treatment in Zimbabwe.....	15
2.5 THEORY OF PLANNED BEHAVIOR (TPB) .....	16

2.5.1 Subjective Norm .....	18
2.5.2 Behavioral Intention Versus actual behavior.....	19
2.6 CULTURAL AND SOCIO-ECONOMIC FACTORS.....	19
2.7 DEMOGRAPHIC AND ECONOMIC FACTORS.....	20
2.8 STIGMA.....	21
2.9 CONCLUSION .....	22
3.2 RESEARCH APPROACH .....	23
3.3 RESEARCH DESIGN .....	24
3.3.1 Descriptive.....	24
3.3.2 Exploratory .....	24
3.3.3 Survey .....	25
3.4 RESEARCH SETTING .....	25
3.5 ELIGIBILITY CRITERIA.....	25
3.6 POPULATION.....	26
3.7 SAMPLE AND SAMPLING .....	26
3.7.1 Sampling.....	26
3.7.2 Sampling Procedure .....	27
3.8 DATA COLLECTION.....	28
3.8.1 Data Collection Approach and Method .....	28
3.9 PRE-TESTING THE INSTRUMENT.....	29
3.10 MEASURES TO ENSURE RELIABILITY AND VALIDITY .....	30
3.10.1 Reliability .....	30
3.10.2 Validity .....	30
3.10.2.2 <i>Internal validity</i> .....	31
3.10.2.3 <i>Content validity</i> .....	32
3.10.2.4 <i>Face validity</i> .....	32
<b>3.12 ETHICAL CONSIDERATIONS .....</b>	<b>33</b>
<b>3.13 CONCLUSION.....</b>	<b>34</b>
CHAPTER 4.....	35
DATA ANALYSIS AND DISCUSSION.....	35
4.1 INTRODUCTION .....	35
4.2 DATA PRESENTATION AND DISCUSSION.....	35

4.2.1 Respondent's age .....	36
4.2.2 Respondents' Gender.....	37
4.2.3 Respondents' highest level of education .....	38
4.2.4. Respondents' Employment status .....	39
4.2.5 Respondents' average monthly income.....	40
4.2.6 Nature of relationship with current sexual partner.....	41
4.2.7 Knowledge of HIV positive status .....	42
4.2.8 Health Insurance .....	43
4.2.9 Period of time after Testing HIV Positive.....	43
4.2.10 Seeking Medical Treatment.....	44
4.2.11 Alternative forms of treatment .....	46
4.2.12 Predictor for seeking Medical Treatment (n=60).....	47
4.3 CONCLUSION .....	48
CHAPTER 5 .....	49
FINDINGS, LIMITATIONS AND RECOMMENDATIONS .....	49
5.1 INTRODUCTION .....	49
5. 2 METHODOLOGY .....	49
5.3.1 Age Distribution of Respondents .....	50
5.3.2 Respondents' Gender.....	50
5.3.3 Respondent's Highest Level of Education.....	51
5.3.4 Respondent's Employment status .....	51
5.3.5 Respondent's Average Monthly Income .....	52
5.3.6 Nature of relationship with current sexual partner.....	52
5.3.7 Knowledge of HIV positive status .....	53
5.3.8 Health Insurance .....	53
5.3.9 Length of Time since testing HIV positive .....	53
5.3.10 First presentation at Health Facility seeking treatment for HIV/AIDS .....	54
5.3.11. Alternative forms of treatment (Coping Mechanisms) .....	54
5.3.12 Predictor for seeking Medical Treatment.....	54
5.5 RECOMMENDATIONS .....	55
5.5.1 Recommendations to Nursing/Health Practice .....	55
5.5.2 Recommendations to Health Promotion .....	56

5.5.3 Recommendations to health research .....	57
5.6 CONCLUSION .....	57



<b>LIST OF TABLES</b>	<b>Page</b>
Table 4.1	Gender Statistics.....36
Table 4.2	Period since Testing.....43
Table 4.3	First presentation After Testing.....44

<b>LIST OF FIGURES</b>	<b>Page</b>
Figure 2.1	Theory of Planned Behavior .....16
Figure 4.1	Age of respondents.....35
Figure 4.2	Highest level of education.....37
Figure 4.3	Respondent's employment status.....39
Figure 4.4	Average monthly income.....40
Figure 4.5	Nature of relationship with sexual partner.....41
Figure 4.6	Coping mechanisms.....45
Figure 4.7	Predictors for seeking treatment.....47

**LIST OF ABBREVIATIONS**

AIDS	Acquired Immuno-Deficiency Syndrome
ART	Antiretroviral Treatment
ARVs	Antiretrovirals
HIV	Human Immunodeficiency Virus
NIAD	National Institute of Allergy and Infectious Diseases
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
OI	Opportunistic Infections
PLWHA	People Living With HIV and AIDS
PMTCT	Prevention of Mother To Child Transmission
UNAIDS	United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
VCT	Voluntary Counseling and Testing
ZDHS	Zimbabwe Demographic Health Survey

<b>LIST OF ANNEXURES</b>	<b>Page</b>
Annexure 1: Informed Consent Form.....	64
Annexure 2: Request to conduct study at Mpilo Central Hospital.....	67
Annexure 3: Permission to conduct study at Mpilo Central Hospital.....	69
Annexure 4: Ethical clearance.....	71
Annexure 5: Questionnaire.....	83

## **CHAPTER 1**

### **ORIENTATION TO THE STUDY**

#### **1.1 INTRODUCTION**

The HIV AIDS pandemic is ravaging the African continent in particular sub-Saharan Africa. The socio-economic impacts of this pandemic are proving to be too costly for the developing countries. The pressure exerted on the health delivery sector is quite often overwhelming. Brain drain is on the increase as health personnel seek to extricate themselves from working in resource limited settings sometimes risking their own health. Stigma and denial also come in to further compound the problem even in situations where positive interventions have been made.

Sub-Saharan Africa of which Zimbabwe is a part of has the highest prevalence of HIV in the world and 83% of deaths from HIV/AIDS occur in this region (WHO 2010:2-3). Zimbabwe has an estimated population of 14 million, with 14.3% HIV prevalence in the age group 15 -49. About 60% of Zimbabwean adults living with HIV at the end of 2009 were female, (UNAIDS 2010:7).

In order to curtail the impact of this ravaging HIV/AIDS pandemic, the Zimbabwean government has taken a number of steps. In 1999 the Zimbabwe National Aids Council (ZNAC) was established through an act of parliament. ZNAC is a multi-sectoral body that has the mandate to mobilize and manage resources, financial or otherwise in the fight against HIV/AIDS in the country. The government also crafted the National Aids Policy in 1999 which emphasized a great deal on Voluntary Counseling and Testing for HIV. In 2007, the government shifted focus from voluntary testing to provider-initiated testing, meaning that whenever a person visits a healthcare facility, they will be offered HIV testing as part of the hospital service. However despite gains made in making HIV/AIDS testing available, a significant percentage of those who have tested positive

to HIV delay seeking treatment until the clinical symptoms of HIV/AIDS have manifested themselves. The delay in presentation for treatment therefore defeats the whole purpose of early detection of the disease.

## **1.2 BACKGROUND TO THE STUDY**

Zimbabwe continues to experience one of the worst HIV infection rates in sub-Saharan Africa. Because of the increased burden of disease due to AIDS, Zimbabwe has not only continued to scale up prevention, care, and treatment programs to combat the disease, but also to strengthen monitoring and evaluation systems for these prevention programs. The HIV/AIDS pandemic in Zimbabwe has reduced life expectancy from 58 years to 35 years for both men and women, (Ministry of Health and Child Welfare 2004:32). In the age group 25-45 years, 80% of deaths are due to HIV/AIDS and over 100 000 people die every week from HIV/AIDS, (Mataure , Ray .,Foreman, and Scalway 2001.1). Unlike in western countries where men having sex with men (MSM) contribute significantly to the spread of HIV/AIDS, in Zimbabwe the common mode of transmission is through heterosexual intercourse which accounts for 92% of cases, (Mataure et al 2001:1).

The economic downfall in Zimbabwe has severely affected the fight against HIV/AIDS. For example, the increasing cost and shortages of anti-retroviral drugs (ARVs) has led to a number of problems, such as the selling of fake drugs at flea markets, (Ministry of Health and Child Welfare 2007:6). More recently there has also been the severe threat brought about by interruptions of regular supplies of ARVs. Reports of breakdowns in drug delivery and theft of drugs by government officials, as well as physicians switching patients on established regimens due to lack of drug availability could all lead to drug resistant HIV strains developing, (Physicians for Human Rights 2009:31) .One study found that Zimbabweans on the government free ARV program are often expected to pay bribes for drugs and services that are supposed to be free under the program, (Zimbabwe Lawyers for Human Rights 2010:11). Furthermore the Zimbabwe Lawyers

for Human Rights (2010:12) indicate that three quarters of those studied had been asked to pay a bribe, either for enrollment, diagnostic services or drugs despite the fact that majority were unemployed and could not afford basic necessities. Health workers low salaries and a lack of public accountability were partly to blame for the widespread occurrence of bribery.

Women and children who live in rural areas reportedly find it very difficult to obtain ARVs. As the income for rural households tends to be low, and rural women often rely upon husbands working in urban areas for financial support, the women cannot afford the cost of the drugs. They also have to travel long distances to health centers in order to receive ARVs, which is another financial burden. Even at sites where treatment has been made accessible, a severe national shortage of healthcare workers has led to long waiting lists and administration problems. According to the latest WHO guidelines (2010:16) only one third of HIV positive patients in need of treatment are receiving it.

The researcher observed that while a lot of emphasis and a number of studies have been done on the subject of Early Testing for HIV, little has been done to establish why a good number of people who are aware of their HIV positive status delay in presenting themselves at hospitals despite all the advantages of doing so early. The study therefore seeks to establish factors leading to delay in seeking treatment by HIV patients as well as the socio-demographic characteristics of those patients who delay seeking treatment.

### **1.3 PROBLEM STATEMENT**

The researcher observed that despite the tremendous success of interventions aimed at encouraging people to be tested for HIV a significant proportion of those tested and found to be positive delay seeking medical assistance until clinical complications of the

disease have manifested. This also happens despite great strides being made to encourage people to enter HAART early.

No studies have been done in Zimbabwe to delineate the predictors for delayed entry into medical care by those who have been diagnosed with HIV, rather most studies have been done to ascertain the reasons for late testing. According to Samet , Fredberg and Stein, (2001:39) after an HIV diagnosis in South America, 25% of the infected persons delay seeking medical care for up to 5 years. In Bulawayo Zimbabwe despite an HIV/ AIDS knowledge rate of 99.9% in the 15-49 age group only a small fraction of those who have been tested HIV positive seek treatment, (Zimbabwe Demographic and Health Survey (ZDHS) 2005:46).

#### **1.4 AIM OF THE STUDY**

This research aims to establish factors associated with delay in HIV sero-positive people into medical care in Bulawayo Zimbabwe.

##### **1.4.1 Research questions**

This research seeks to provide answers to the following questions:

Why do HIV positive people who are aware of their status delay seeking treatment despite the many benefits of early entry into medical care? The research also seeks to answer this question: What are the socio-economic characteristics of those who delay seeking treatment for HIV/AIDS despite being aware of their sero-positive status?



## **1.5 OBJECTIVES OF THE STUDY**

The objectives of the study were to:

- Identify reasons why patients who are aware that they are HIV sero-positive delay in seeking treatment.
- Establish the socio-demographic characteristics of those who delay entry into treatment.
- Make recommendations which will assist the nursing practice, health promotion, public and private sector stake holders to encourage HIV positive people in seeking medical care early.

## **1.6 ASSUMPTIONS**

According to Neuman (2002:41), assumptions are statements accepted as true without scientific evidence and these assumptions provide the reason for research. LoBiondo-Wood and Haber (2001:321) also defined an assumption as “a basic principle assumed to be true without the need for scientific proof”. This study was guided by the assumption that socio demographic factors largely determine whether an HIV sero-positive person enters into treatment early or not.

## **1.7 SIGNIFICANCE OF THE STUDY**

The study wished to highlight the characteristics of people who are aware of their being HIV positive and yet delay seeking treatment until they have developed clinical complications. The researcher hoped that this would then help other players to come up with interventions specifically targeted at this group of people. Currently almost all

interventions in Zimbabwe promote early testing while no interventions answer questions pertaining to the socio-demographic characteristics of those who delay testing. This study however looked at a group of those who would have been tested and found positive but then delay seeking medical treatment until severe clinical complications have developed. The study attempted to answer the question why do people who know their HIV positive status delay entering the treatment regime.

By developing interventions targeted at this group, society can then make maximum benefits from the obvious advantages of early entry into the treatment regime by those who are HIV positive. The effectiveness of Highly Active Ante-retroviral Treatment (HAART) can then be enhanced.

## **1.8 THEORETICAL FRAMEWORK**

The researcher used the Theory of Planned Action (TPA) to facilitate and acquire insight into the reasons for late entry into medical care by HIV/AIDS positive people who have been made aware of their positive status. The TPA was used to gain an insight into the socio-economic characteristics of those who are likely to be delayed presenters.

## **1.9 RESEARCH DESIGN AND METHODOLOGY**

According to Babbie and Mouton (2001:73) research design is a plan or blueprint of how the research will be conducted. For this study, the researcher selected a quantitative design to measure objectively the variables involved and statistically analyze and interpret the data.

One of the key characteristic of quantitative research is that data is collected in a value-free manner and structured methodology is used to facilitate statistical analysis (Saunders, Lewis & Thornhill 2003:83). The researcher selected a quantitative design to focus specifically on the research question, which sought to describe and explore the predictors of delayed presentation to medical care by HIV positive persons in Bulawayo Zimbabwe.

### **1.10 POPULATION AND SAMPLE**

The target population refers to the total group of people who possess the characteristics that a researcher is interested in studying and whom the findings of a study can be generalized while the accessible population is the population that is available for the study, (Polit and Beck 2004:218). The target population for this study consisted of all men and women who despite having been diagnosed of HIV earlier in their lives delay seeking medical care until symptoms of AIDS have developed. A sample of the population was selected by random sampling to participate in the study. Strydom (2002:203) points out that simple random sampling or probability sampling ensures the chances of every person in the population has the same known probability of being selected.

In this study a simple random selection of participants was done in the hospital's Opportunistic Infection Department. This department normally has an average of 150 patients. A sample size of 60 was selected using hospital records for patients in the hospital at the time of the study. Each patient's record was given a number and then the numbers were randomly selected and the patients whose records (numbers) were picked were then requested to participate in the study.

A sample is a subset of the research population. According to Nachamias & Nachamias (2007:179), data collected from the subset is regarded as the basis for generalization. It is assumed that analysis made from researchers' sampling units will produce results

similar to those that would be obtained had the researcher analyzed the entire population (Nachamias & Nachamias 2007:183). Purposive sampling was used to select the site for the study namely patients at the hospital's Opportunistic Infection Department of the hospital.

### **1.11 DATA COLLECTION**

Data refers to the pieces of information in research (Brink, Vander Walt and Rensburg 2006:207). In this study, data collection was structured. In structured data collection a researcher records possible responses in advance and allows the respondents to select the responses applicable to them. Quantitative research uses structured data collection, (Polit and Beck 2004:318, 733). The data collection instrument was a questionnaire.

### **1:12 DATA ANALYSIS**

Data analysis is a process whereby data collected through research is systematically organized, summarized, evaluated and interpreted, (Polit and Beck 2004:451). Data collected was be summarized in tables, ratios will be computed and presented both in tabular and graphical forms with comments attached.

### **1.13 RELIABILITY AND VALIDITY**

Validity is the degree to which an instrument measures what it is intended to measure (Polit & Beck 2008:768). According to Strydom (2002:166), validity refers to the process whereby the instrument actually measures the concept question and the concept is measured accurately in broad terms.

Reliability is the degree of consistency or dependability with which the instrument measures the attribute it is designed to measure. If the instrument is reliable, the results

will be the same each time the test is repeated (Polit & Beck 2008:764). In order to increase the reliability of this study, the questionnaire was translated into local languages of Ndebele and Shona and pre-tested within the same community. More measures to ensure reliability and validity are dealt with in Chapter 3.

#### **1.14 DEFINITION OF TERMS**

##### **Late presenter**

A patient whose medical records show that his or her CD4 cell count at first presentation to medical care after HIV diagnosis is less than 200 cells/  $\mu\text{L}$ . This definition is also the one used by Zimbabwe's Ministry of Health and Child Welfare, (MOHCH 2004).

##### **Medical Care**

Care which is provided by a nurse or doctor at a hospital or clinic.

##### **HIV Seropositive**

A person whose medical records show that he or she is HIV positive.

##### **Patient**

One who has presented himself or herself at a hospital in Bulawayo with symptoms of HIV/AIDS.

## **115 SCOPE**

The study was conducted at a General hospital based in Bulawayo Zimbabwe.

### **1.16 LIMITATIONS**

The study was limited to one general hospital. The hospital concerned is situated in a city catering mostly for urban dwellers of low to middle income.

### **1.17 ETHICAL CONSIDERATIONS**

The principles of the Belmont Report (1979) guided the study, namely the principles of beneficence, informed consent, respect for human dignity, justice (Polit and Beck 2004:141-143). The researcher obtained permission from the hospital and the respondents gave their consent prior to participation in the study.

### **1.18 OUTLINE OF THE STUDY**

Chapter 1 outlines the research problem and rationale for and the purpose, objectives and significance of the study. Chapter 2 covers the literature review for the study. Chapter 3 describes the research methodology while chapter 4 discusses the data analysis and interpretation. Chapter 5 concludes the study, presents the findings and their relationship to TPA and makes recommendations for practice and further research.

## **1.19 CONCLUSION**

This chapter described the research problem as well as the purpose and significance of the study in highlighting the different predictors of delayed presentation to medical care by HIV diagnosed people. The research methodology, scope and limitations of the study were dealt with briefly and key terms used in the study were defined. Chapter 2 discussed the literature review conducted for the study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter discusses the literature review for the study. According to Polit and Beck (2004:88), literature review “lays the foundation of a study and enables the researcher to discover what is known about the topic of interest in order to conduct research that adds to the body of knowledge”. The researcher found limited sources on the reasons for late entry into medical care by HIV sero-positive people who are aware of their status in Bulawayo Zimbabwe.

The health status of patients at the time of HAART initiation plays a crucial role in the success of treatment. Patients with advanced HIV/AIDS at the time of HAART initiation are less likely to respond to treatment, are more likely to place financial strain on health services, and have a higher mortality rate compared with those who initiate earlier, (Kitahata, Mari,Gange, Abhraham, Merriman, Saag and Justice 2009:360). In addition, late presentation poses a higher cumulative risk of HIV/AIDS transmission to others, considering that earlier presentation and HIV-suppressing treatment might otherwise reduce viral load and risk of transmission.

##### **2.1.2 Definition of late presentation**

There are a number of definitions of late presentation used in different studies. Late presentation can be defined as patients who present with low CD4 cell count of less than 200/mm<sup>3</sup> (WHO 2005:15). It has also been defined as those who receive HIV diagnosis within 3 months of AIDS diagnosis. One definition for late presentation is those who present with CD4 cell count of less than 350/mm<sup>3</sup>. Others have defined it as



patients with more than six months between their first HIV positive test and presentation for HIV medical care. In most resource limited countries such as Zimbabwe the first definition is the one which is used (Ministry of Health 2004:19).

In this study the researcher uses the following definition. A late presenter is an HIV/AIDS infected patient whose medical records show that his or her CD4 cell count at first presentation to medical care is less than 200 cells/  $\mu\text{L}$ .

### **2.3 Benefits of Early presentation**

Literature is awash with benefits of early treatment. Early presentation for HIV/AIDS allows for greater immunological recovery, a reduction of AIDS progression, a reduced risk of related illness and lower mortality. Delayed presenters are likely to have a poorer treatment response when they do start highly active antiretroviral therapy (HAART). Late presenters generally contribute to higher health care expenditures, in other words it is more expensive to treat a late presenter than an early presenter, Chen (2006:1007). Late diagnosis and subsequent delayed presentation for medical care is therefore detrimental to the individual and to the society. Despite these benefits 77% of all AIDS related deaths could be considered late presenters, Alder and Mellenberg (2008:6). They further point out that 25% of infected persons delay seeking care for up to five years.

A study from the Netherlands found that mortality after starting antiretroviral therapy could be reduced by 20% if patients were to present for HIV care with a CD4 count  $>400$  cells/mm<sup>3</sup> (Shaikh et al 2009:132). Current WHO guidelines recommend starting antiretroviral therapy before the CD4 count reaches 350 cells/mm<sup>3</sup> (WHO 2010:46). This underscores the importance of identifying infection and engaging in HIV care at an earlier stage than is occurring currently in Zimbabwe and the Southern African region at large. A delay in presentation for treatment not only increases the chance of clinical disease progression for that patient but also increases the risk of ongoing transmission. Early effective antiretroviral treatment can lower circulating HIV RNA levels, thereby

decreasing the risk of HIV transmission (Kitahata 2009:360). Patients who learn they are infected with HIV may reduce their HIV RNA level with effective antiretroviral treatment and may reduce their risk-taking behavior, consequently resulting in reduced risk of transmitting HIV to others (Marks and Allegrante 2005:436).

In a study carried out by National Institute of Allergy and Infectious Diseases (NIAID 2011:13), investigators enrolled 1,763 couples who were not eligible for ART by WHO standards in nine countries around the world. Couples were randomly assigned to one of two study groups. In the first group, the HIV-infected partner initiated antiretroviral therapy (ART) as soon as the couple enrolled in the study (the immediate treatment group); in the second group, infected partners did not begin ART until their CD4+ counts decreased to between 200 and 250 cells/mm<sup>3</sup> or they developed an AIDS-related illness (the delayed treatment group). Couples in both groups received HIV primary care, counseling and condoms. The study concluded that people with HIV who take antiretroviral drugs before their health declines have a 96 percent lower risk of transmitting the virus to a partner. Until now, antiretroviral therapy was known to improve the health of people infected with human immunodeficiency virus, but this is the first study to show a solid impact on preventing transmission to an HIV-negative partner. The results also demonstrated a clinical benefit of early ART, especially in the prevention of a type of tuberculosis infection outside the lungs.

## **2.4 HIV/AIDS IN ZIMBABWE**

### **2.4.1 HIV AIDS prevalence in Zimbabwe**

The first reported case of AIDS in Zimbabwe occurred in 1985, five years later around 10% of the adult population were thought to be infected with HIV (UNAIDS 2010:17). The figure rose dramatically in the first half of the 1990s, peaking at 26.5% in 1997,

(UNAIDS 2010). However from this point the HIV prevalence is thought to have declined, making Zimbabwe one of the first nations to witness such a trend. According to government figures, the adult prevalence was 23.7% in 2001 and plummeted to 14.3% in 2010 (UNAIDS 2010).

In 1999 Zimbabwe produced a National Aids Policy which emphasized a great deal on Voluntary Counseling and Testing for HIV. As a result the total number of facilities offering HIV testing increased from 395 in 2005 to 1560 in 2009, (WHO 2010:76). In July 2006 Zimbabwe launched the National HIV/AIDS strategic plan (ZNASP 2006 - 2010) which focused on scaling up the multi-sectoral response to HIV/AIDS and scaling up universal access to care and treatment.

#### **2.4.2 HIV/AIDS treatment in Zimbabwe**

The rapid decline in the economy of the country has adversely affected medical care. In 2002 for example the government had to declare the acute shortage of ante-retroviral drugs a national disaster. The shortage led to high prices being charged, corruption with some health workers asking for bribes for patients to be enrolled on the HAART program. Fake drugs were also reported to be in circulation. According to the MOHCW (2010), in the period 2008-2009, Zimbabwe has continued to scale up access to care and treatment for HIV/AIDS and related opportunistic infections. The number of patients on ART increased from 99 408 (9 594 children) at the end of 2007 to 148 144 (13 278 children) in December 2008 and 218 589 (21 521 children) by end of December 2009. According to the latest WHO (2010), only a third of HIV positive patients in need of treatment are receiving it in Zimbabwe.

Since the mid-1990s, public health efforts in Zimbabwe have focused on identifying HIV infection at an early stage, which should imply an increase in patients presenting for HIV care earlier in the course of disease. However according to WHO, (2010:47), the mean

CD4 count at first presentation for care in the country is 250 mm<sup>3</sup>. Elsewhere the trend is the same, in Alabama for example, one study revealed that among 1209 patients who newly presented for care in an infectious diseases clinic, 41% had already progressed to AIDS (Krawczyk 2006:472).

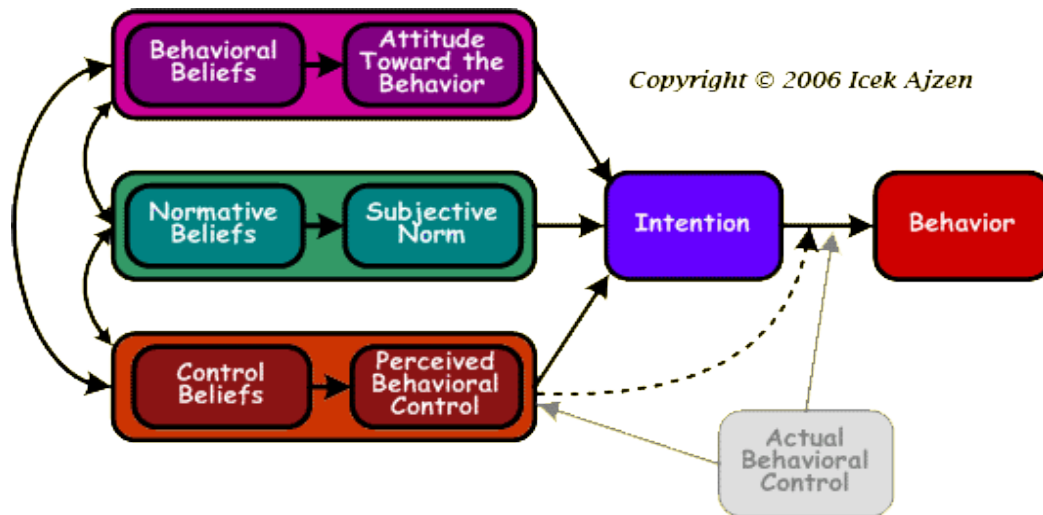
## **2.5 THEORY OF PLANNED BEHAVIOR (TPB)**

The Theory of Planned Behavior (TPB) is used in this study to determine its relevance in explaining and predicting behavior of late presentation by HIV/AIDS people who been tested. TPB was created by I. Ajzen in 1985. This theory is an extension of Ajzen and Fishbein's theory of reasoned action (1975). According to Ajzen (1991), over the past twenty years a number of researchers have used the TPB to predict and explain an individual's behavioral intentions and behaviors. According to Cuerrier Deshaies, Mongeau and Vallerand (1992:47), among many models and theories, the theory of planned behavior is a well-known theory. This theory explains and predicts human behavior and behavioral intention. Action is determined by one's behavioral intentions. Therefore, an individual's behavior can be controlled by the individual's consciousness. Behavior and behavioral intentions are influenced by attitude toward the behavior and subjective norms. In a real situation involving behavior, the human's decision is not controlled solely by individual consciousness; it is influenced by unmotivated factors, such as information, time, and money. In addition to attitude toward the behavior and the subjective norm in the theory of planned behavior, perceived behavioral control can influence intention as well. Perceived behavioral control influences the individual's decision through behavioral intention.

Components of TPA could be used in finding out the reasons for late presentation by HIV positive people who are aware of their positive status and in designing interventions to encourage early entry into care by such people. The theory of planned behavior

emphasizes that human behaviors are governed not only by personal attitudes, but also by social pressures and a sense of control.

### Theory of Planned Behavior



**Fig 2:1.**

**Theory of Planned Behavior. Source: Ajzen (2006:182)**

In psychology, theories are used to provide a model for understanding human thought, emotions, and behaviors. A model is a “symbolic depiction of reality and uses diagrams and symbols to represent ideas. The components of a model can also guide the research in the research tasks”, (Brink et al 2006:23). TPB emphasizes that human behaviors are governed not only by personal attitudes, but also by social pressures and a sense of control. According to Cooke and Sheeran, (2004:89), individuals are more likely to execute rather than neglect their intentions, such as a plan to refrain from alcohol, if they express these plans on more than one occasion.

Some examples of control beliefs for late entry into medical care by HIV positive people who have long established their sero-positive status could include the high cost of antiretroviral (ARV) drugs, their unavailability or their inaccessibility. In some situations lack of information or knowledge result in paralysis in the sense that one ends up not presenting himself early for treatment simply because one is not aware of the benefits of doing so. In one study Kigozi et al (2009:7) observed that lower education showed a significant positive association with late presentation for HIV.

### **2.5.1 Subjective Norm**

Subjective norm is “defined as an individual's perception of whether people important to the individual think the behavior should be performed, subjective norms are the social pressures on an individual's perception to perform or not perform a behavior, (Chen 2007:15). According to this construct it is easier for one to seek treatment when those around him such as spouse, work mates, friends and family think positively about it. ‘Significant others’ therefore play a pivotal role in predicting behavior. In the case of HIV behaviors or actions such as being tested, using condoms or seeking treatment are to a high degree dependent on the subjective norms.

An HIV sero-positive person is likely to present himself at the hospital or clinic when he or she perceives people around him or herself such as spouse, family, employer, workmates or friend as being in full support of the idea. If one thinks that doing so will receive the approval of these ‘significant others’ then according to the TPA one is likely to go to the hospital. Fear of negative consequences after a positive test result can lead to delay in seeking medical treatment. After diagnoses HIV infected persons experience physical harm and sometimes abandonment by partners or family members.

### **2.5.2 Behavioral Intention Versus actual behavior**

Intention is an indication of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior. Behavioral intention is a measure of how much one is willing to try or how much effort one is willing to exert in order to perform the behavior. In this study behavioral intention has to do with the question of how strong is an HIV positive person's desire to seek treatment. The theory of planned behavior explains that only when one really wants treatment will one be able to seek it.

A study by Raves et al (1998:549), revealed that although most women intended seeing a physician for their HIV infection, the most common barrier arose out of psychological responses upon learning their sero-status. This included denial and associated cognitive distortions of their significance and status, experiencing paralyzing fear and anxiety about having the illness namely physical symptoms, stigma of HIV/AIDS. Barriers normally include cost, travel, lack of information and lack of consistency and referral across services, as well as stigma and stress associated with having a positive HIV status. In a study conducted by Kigozi et al (2009:10) it was clear that cost and poverty are major barriers to accessing HIV treatment alongside other necessities such as food.

## **2.6 CULTURAL AND SOCIO-ECONOMIC FACTORS**

Cultural and socio-economic factors have been implicated as obstacles to women's acquisition of knowledge about HIV disease and treatment options contributing to delays in seeking treatment, Abrams (2005:248). Anderson et al (2006:69) argues that women may defer attending to their own medical condition because of their care giving responsibilities for another infected family member such as a partner or child. Socio-economically deprived HIV –infected women may experience financial barriers to health

care in the form of failure to meet the cost of treatment and failure to meet the non medical costs such as transportation to medical appointments McDonald (2003:608).

In Zimbabwe for example gender inequalities play a significant role in the epidemiology of HIV and care of HIV/AIDS patients. Constrictive attitudes towards female sexuality contrast with lenient ones towards the sexual activity of men, resulting in a situation where men often have multiple sexual partners and women have little authority to instigate condom use. Sexual abuse, rape and coerced sex are all common, and as the economy deteriorates more women are turning to sex work as a means of survival, Mail and Guardian 2010. According to Zimbabwe's National AIDS Council, an estimated 60% of Zimbabwean adults living with HIV at the end of 2009 were female. This gender gap is even wider amongst young people – women make up around 77% of people between the ages of 15 and 24 living with HIV (UNAIDS 2008:12).

## **2.7 DEMOGRAPHIC AND ECONOMIC FACTORS.**

The researcher found that a number of studies cite several demographic factors as contributing to the delay in presentation for care by HIV positive people. For example Shaikh et al (2005:13) points out that, characteristics associated with late presentation in the developed world include older age, male sex, risk behavior (including injection drug and alcohol use), lower income, and low degree of education. A large proportion of HIV-infected individuals in the developed world, roughly 15%–43%, present at clinics for care with advanced or severe disease namely with WHO stage 3 or 4, CDC Category B or C, or CD4 #200 cells/mL (WHO 2010:48).

In China where just like in Zimbabwe patients must pay in order to receive medical care, a study by Hangjie Xiaojiing, Erijan (2009:2) patients who delayed seeking treatment were asked the reasons for their delay. The most common reasons reported were that it did not make any difference to wait for a while (69%), that they were afraid to be seen



by others (53%) and that they worried about the high cost of medical treatment. In the same study thirty-four patients (32%) reported that they preferred to go to a drugstore for medication instead of a clinic.

## **2.8 STIGMA**

AIDS-related stigma and discrimination refers to prejudice, negative attitudes, abuse and maltreatment directed at people living with HIV/ AIDS (Cogan and Herek 2009:39). They further articulate that stigma can result in people being shunned by family, peers and the wider community; poor treatment in healthcare and education settings; an erosion of rights; psychological damage; and can negatively affect the success of testing and treatment. Feeling stigmatized, delaying seeking treatment, and unwillingness to notify spouses and sexual contacts are important issues in HIV/ AIDS prevention and control in Zimbabwe. The perception of stigma blocks the acceptance of community prevention efforts among people at risk and reduces the probability that they will inform their sexual contacts, and hence also increase the probability that even though they know their HIV positive status they will enter into medical care late.

In 2008 the Secretary General of the United Nations Ban Ki-moon was quoted by the Washington Times (6 August 2008:3) as saying;

*“Stigma remains the single most important barrier to public action. It is a main reason why too many people are afraid to see a doctor to determine whether they have the disease, or to seek treatment if so. It helps make AIDS the silent killer, because people fear the social disgrace of speaking about it, or taking easily available precautions. Stigma is a chief reason why the AIDS epidemic continues to devastate societies around the world.”*

## **2.9 CONCLUSION**

This chapter discussed the literature review conducted for the study. The literature review includes Theory of Planned Behavior (TPB), definition of early presentation, the benefits of early entry into medical care by HIV/AIDS positive people and HIV/AIDS in Zimbabwe.

Chapter 3 describes the research methodology.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter describes the research methodology, including the design, purpose and research objectives, setting, population and sample, data collection and analysis, measures to ensure reliability and validity and ethical considerations.

The purpose of the study is to establish reasons why patients who are aware that they are HIV sero-positive delay seeking treatment. The research objectives that guided the study were to:

- Identify reasons why patients who are aware that they are HIV sero-positive delay in seeking treatment.
- Establish the socio-demographic characteristics of those who delay entry into treatment.
- Make recommendations which will assist the nursing practice, health promotion, public and private sector stake holders to encourage HIV/AIDS positive people in seeking medical care early.

#### **3.2 RESEARCH APPROACH**

The researcher adopted a quantitative research approach in this study. Quantitative research involves measurement and quantification of data obtained in a study and is often done in a controlled setting (experimental). It can also be non-experimental where the setting is natural and there is no manipulation of the independent variable. Manipulation refers to treatment that is introduced by the researcher to find out its effect on the dependent variable, (Brink et al 2006:93). HIV AIDS positive people who were

the independent variable, were not subjected to any form of manipulation by the researcher. A quantitative, non experimental approach was selected because the study was conducted in a natural setting. The study sought to establish the factors that lead to delayed presentation by HIV AIDS positive people who have been tested and are aware of their status.

### **3.3 RESEARCH DESIGN**

A non-experimental, descriptive exploratory survey was used in the study. A research design is “a plan for approaching a research question”(Polit and Beck 2004:730). An explorative descriptive study can generate valuable information about the phenomenon of interest. The study design allowed the researcher to remain objective as the study focused on measurable variables such as age, income levels, marital status, knowledge of HAART among HIV/AIDS positive people.

#### **3.3.1 Descriptive**

The researcher sought to describe the socio-economic characteristics of those who delay entering into medical treatment among HIV/AIDS positive people.

#### **3.3.2 Exploratory**

The researcher sought to explore the reasons for late entry into medical care among HIV sero-positive people in Bulawayo who are aware of their status. In other words the researcher was interested in finding out why is it that a significant number of people delay seeking treatment after testing HIV/AIDS positive.

### **3.3.3 Survey**

A survey refers to non-experimental research whereby information is gathered, from a portion of the population and focuses on people's intentions, behavior, knowledge, beliefs and values. Data in a survey are collected by way of self-report and information on a person's background is collected for analysis, comparison and explanation, (Polit and Beck 2004:234). In this study, the researcher sought information in order to explore and describe the predictors to delayed entry into medical care by people who have been diagnosed with HIV/AIDS in Bulawayo Zimbabwe.

### **3.4 RESEARCH SETTING**

The research setting refers to "the surrounding environment in which the research takes place" (Strydom 2002:301). The study was conducted in a hospital setting in the city of Bulawayo which is Zimbabwe's second largest city. Patients in the Opportunistic Infection Department at the time of the study were the respondents.

### **3.5 ELIGIBILITY CRITERIA**

Eligibility criteria has been defined by Brink *et al* (2006:124) as the criteria used to select the respondents for a study. In order to be eligible to participate in this study, the respondent could be a male or female and had to be a patient in the hospital's Opportunistic Infection Ward:

- Must be 18 years or above
- Medical records which show that he or she is admitted in the hospital's Opportunistic Infection Department.

- A patient whose medical records indicated that his or her CD4 cell count was less than 200 cells/ $\mu$ L at first presentation to medical care after HIV diagnosis.

### **3.6 POPULATION**

The target population is “the total group of people who possess the characteristics that the researcher is interested in studying and to whom the findings of a study can be generalized whereas the accessible population is the group that is available for the study” (Polit and Beck 2004:218). The target population in this study was all HIV/AIDS positive patients attending the selected hospital in Bulawayo while the accessible population was all HIV/AIDS patients attending the selected hospital’s Opportunistic Infection Department (OID) and were actually available and accessible for the study.

### **3.7 SAMPLE AND SAMPLING**

#### **3.7.1 Sampling**

A purposive sampling was method was used to select the site and a simple random sampling was used to select the participants. A simple random sample is a subset of individuals (a sample) chosen from a larger set (a population). Each individual is chosen randomly and entirely by chance, such that each individual has the same probability of being chosen at any stage during the sampling process, and each subset of  $k$  individuals has the same probability of being chosen for the sample as any other subset of  $k$  individuals (Yates, Daniel, David, Moore, Daren, Starnes 2008:61). Simple random sampling allows one to draw externally valid conclusions about the entire population based on the sample.

Probability or random sampling refers to “the selection of a sample in such a way that every individual in the accessible population has an equal chance of being selected for

the study. Random sampling is done from a list of all members of the population” Brink et al (2006:126). Hospital records were used and participants were randomly selected from the records.

Probability sampling was used in the study because it increases the likelihood that all elements in the population would have an equal chance of being included in the sample. In probability sampling, the sample is more likely to be representative of the population and the findings of the study can be generalized to the study population. Probability sampling reduces the sampling bias and the sampling error can be calculated (Brink et al 2006:26). The hospital records containing admitted patients were used as the sampling frame.

### **3.7.2 Sampling Procedure**

The researcher sought the assistance of hospital staff to obtain the in-patient register in the Opportunistic Infection (OI) department of the hospital. The O.I. is where patients suffering from STIs and HIV/AIDS related illnesses are given medical care. The hospital staff was requested to provide only records of patients who were over 18 years of age. The researcher made a list of patients who met the eligibility criteria i.e. those patients whose records show that they were HIV positive and assigned a number to each patient. Pieces of paper equal to the number of names on the list were made and each numbered. The pieces of paper were then put in a non-transparent bag and a nurse was asked to draw the papers one at a time till she got to 60 papers. The 60 papers were then taken against the list and those with matching numbers were then selected for the study.

A total of 60 patients were selected for the study from a total of 81 patients who were admitted in the hospital when the study was initiated. Among the selected patients (68.3%: 41) were females and (31.7%: 19) were males.

The size of a sample is “the total number of the respondents who actually participate in a study in relation to the accessible population”, (Brink et al 2006:135). Furthermore, there are no strict rules to determine the sample size. Too large a sample may be viewed as unnecessary while too small may not be as effective. In determining sample size, the precision of the data collection instrument should be considered. Less precision requires a large sample than that required when an instrument with more precision is used. Heterogeneity of the population should also be assessed. Heterogeneity of the sample relates to the degree of differences of an attribute from one person to another in that sample. When demographic variables increase, the sample size should also increase (Polit and Beck 2004:422). In this study a sample size of 60 was selected from the total accessible population of 81 patients.

### **3.8 DATA COLLECTION**

Data refers to the pieces of information gathered in a research, (Brink, Vander Walt and Van Rensburg: 2006:201). Structured data collection approach was used in this study. In structured data collection the researcher records the possible responses in advance and allows the respondents to select the responses applicable to them. Quantitative research predominantly uses structured data collection approach (Polit and Beck 2004:318, 733).

#### **3.8.1 Data Collection Approach and Method**

Polit and Beck (2004:318) point out that in structured data collection:

- The wording is pre-determined and standardized and the same method or instrument is used for all respondents.
- An indication is given in advance as to what information will be collected and how it will be collected.



- The researcher develops the data-collection instrument beforehand.
- Data collected can be quantified with ease.
- Data collection is unobtrusive to a certain extent because respondents are allowed to respond without interference.
- The researcher is required to have some knowledge of the expected behavior.

In this study the questionnaire was developed beforehand and the respondents were given the same questionnaire to respond to. The information collected addressed the objectives of the study which were stated beforehand. The researcher did a literature review to gain some knowledge on the characteristics of late presenters and the predictors for late presentation to medical care by HIV/AIDS infected and diagnosed people.

A data collection instrument is a tool that is used to collect data and elicits the same information from each respondent. A questionnaire was used as the data-collection instrument. A questionnaire is a method of data collection through self-administration of written questions (Polit & Beck 2004:720, 729). The questionnaire was divided into three sections to cover demographic information; the respondents' knowledge about HIV testing and the need to seek treatment.

### **3.9 PRE-TESTING THE INSTRUMENT**

A pre-test of the instrument refers to conducting a trial administration of the data-collection instrument to make sure that the instrument can be clearly understood by the respondents and that it captures the required data (Polit and Beck 2008:329). The instrument can be refined if necessary after pre-testing to ensure that it captures the appropriate data. Conducting a pre-test also enables the researcher to determine how long it takes to complete the questionnaire. Pre-testing the instrument also provides information that reveals to the researcher if there are any offensive, inadequately worded questions so that adjustments can be made where necessary (Polit and Beck

2008; 327). The researcher conducted a pre-test with ten patients at United Bulawayo Hospital. No changes were made after pre-test, as respondents understood the questions. The questionnaire was also given to expert researchers, including the researcher's study supervisors, to scrutinize for validity and reliability. These 10 participants were not included in the main study.

### **3.10 MEASURES TO ENSURE RELIABILITY AND VALIDITY**

Reliability and validity are important attributes of any good research.

#### **3.10.1 Reliability**

According to Polit and Beck (2008:416), reliability refers to the consistency with which the instrument repeatedly measures what it is supposed to measure and yields the same results if used by other researcher. The quality and adequacy of an instrument determines its reliability. The reliability of the instrument was checked and confirmed by the supervisor. In addition, pre-testing of the instrument was also conducted before the study.

#### **3.10.2 Validity**

The validity of an instrument is the degree to which the instrument measures what it is supposed to measure (Polit and Beck 2008:422). Brink et al 2006:118 points out that validity refers to the accuracy and truthfulness of the findings. There are four types of validity, namely external, internal, content and face validity.

##### *3.10.2.1 External validity*

Brink et al 2006:119 asserts that external validity refers to "the extent to which the findings of a study can be generalized to similar settings". In order to ensure external validity, the researcher minimized the Hawthorne effect, which is a threat to external

validity. The Hawthorne effect occurs when the subjects of a study behave in a certain way because they are aware that they are involved in the study. When subjects are aware that they are involved in a study, they may give responses that they believe are socially acceptable but do not reflect their true experiences (Brink et al 2006; 101). In a study the respondents give responses which they consider desirable because of fear of lack of confidentiality leading to exposure of their risk behavior and the ramifications that may have followed. In order to minimize the Hawthorne effect, the researcher explained the nature, purpose and significance of the study and assured the respondents that their identities would be protected. The respondents were therefore asked to give honest responses, as they would not be prejudiced because of their responses, which were anonymous and could in no way be linked to their names. In addition, the respondents were also asked not to record their names on the questionnaire sheets. Data were collected in a normal hospital setting to ensure minimal disturbance to the respondents.

### *3.10.2.2 Internal validity*

Internal validity refers to the degree to which the results of a study illustrate characteristics of the independent variable rather than extraneous factors. The results of this study should be a true reflection of the health seeking behavior of HIV positive people who know their status not attributable to extraneous factors such as use of complicated language or lack of confidentiality. Selection bias which is a threat to internal validity was reduced by using the random sampling design. Selection bias refers to a situation where the researcher does not use random sampling and subtle differences between individuals participating in a study, such as personality and attitudes may influence the outcome of the study. The questionnaire was constructed in simple language and was short to avoid boredom and tiredness, which can also be a threat to internal validity. Sensitive questions were asked at the end of the questionnaire to ensure that they do not affect any other responses (Brink et al 2006:150).

### *3.10.2.3 Content validity*

Content validity refers to whether an instrument measures what it is supposed to measure, looking at the items it contains (De Vos 2001:168). In this study the questionnaire contained items that measured the aspects under study appropriately and adequately.

### *3.10.2.4 Face validity*

Face validity refers to ‘whether an instrument appears to measure the construct appropriately’ (De Vos 2001:167). The instrument has to appear to be a relevant measure of the attributes of interest to the study even to the respondents. The supervisors’ guidance was sought to ensure face validity.

## **3.11 DATA ANALYSIS**

In data analysis the data collected through research is systematically organized, summarized, evaluated and interpreted (Polit and Beck 2008:451). The data was analyzed using the SPSS version 13.0 statistical computer software package, and the results presented in descriptive statistics such as frequencies and percentages. Univariate analysis was used to assess the associations between delayed presentation for HIV care and socio-demographic, HIV testing, and behavioral factors. Data collected was summarized in tables, ratios were then computed and presented both in tabular and graphical forms with comments attached.

### 3.12 ETHICAL CONSIDERATIONS

Research that involves people as subjects, in particular, should be conducted in an ethical manner to protect the rights of the subjects. In this study the researcher followed ethical guidelines of the Belmont Report (in Polit and Beck 2008:141-43). The Belmont Report was used in 1978 in the USA by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and is based on three ethical principles: beneficence, respect for human dignity and justice (Polit & Beck 2008:141-43).

According to the principle of beneficence, ethical research should protect subjects of research from any harm whether physical, psychological, economic or otherwise (Babbie & Mouton 2001:529). The researcher ensured that no harm came to the respondents by seeking permission to conduct the study from the hospital authorities and the respondents themselves. The researcher explained the nature, purpose and significance of the study to the respondents beforehand to allay any anxieties. Respondents were also informed that the results of this study may be published. They were assured that confidentiality and anonymity would be maintained and that no harm or loss to their person or reputation would result from participating in the study. It was made clear to each respondent that participation was voluntary and that they could withdraw from the study at any time without fear of any repercussions. The study was conducted in a natural setting namely the hospital ward to ensure minimal disturbance to the respondents' daily routine. The questionnaire was worded clearly and simply for ease understanding. It took a reasonably short time (10 -15) minutes to complete the questionnaire.

The principle of respect for human dignity encompasses the right to self determination, respect and full disclosure about the study (Polit & Beck 2008:147-149). The right to self-determination and informed consent were observed as the respondents participated voluntarily and could withdraw from the study at any time. The respondents were granted freedom to ask questions to clarify issues not clear to them. The researcher explained his role in the study and provided them with a contact telephone number. The respondents were not deceived and their contribution was acknowledged.

The principle of justice encompasses the right to fair treatment and privacy for subjects of research. Data gathered from the study was kept and treated as strictly confidential and anonymity was observed by ensuring that the respondents did not write their names on the questionnaires. All agreement and promises made during the study were honored, including the right to withdraw from the study at any time. Information gathered from the study was used only for the intended purpose and findings were reported as accurately as possible (Polit & Beck 2008:149-150)

### **3.13 CONCLUSION**

This chapter covered the research methodology, including the design, purpose, research objectives, research setting, population, sample, sampling method, data collection, measures to ensure reliability and validity, and ethical considerations. Chapter 4 discusses the data analysis and interpretation.

## **CHAPTER 4**

### **DATA ANALYSIS AND DISCUSSION**

#### **4.1 INTRODUCTION**

In this chapter data analysis and interpretation thereof are discussed. The purpose of the study was to establish the factors that lead to delayed presentation by HIV seropositive people who are aware of their status. This study attempted to determine the predictors of late entry into medical care by those who have tested HIV positive in Bulawayo Zimbabwe.

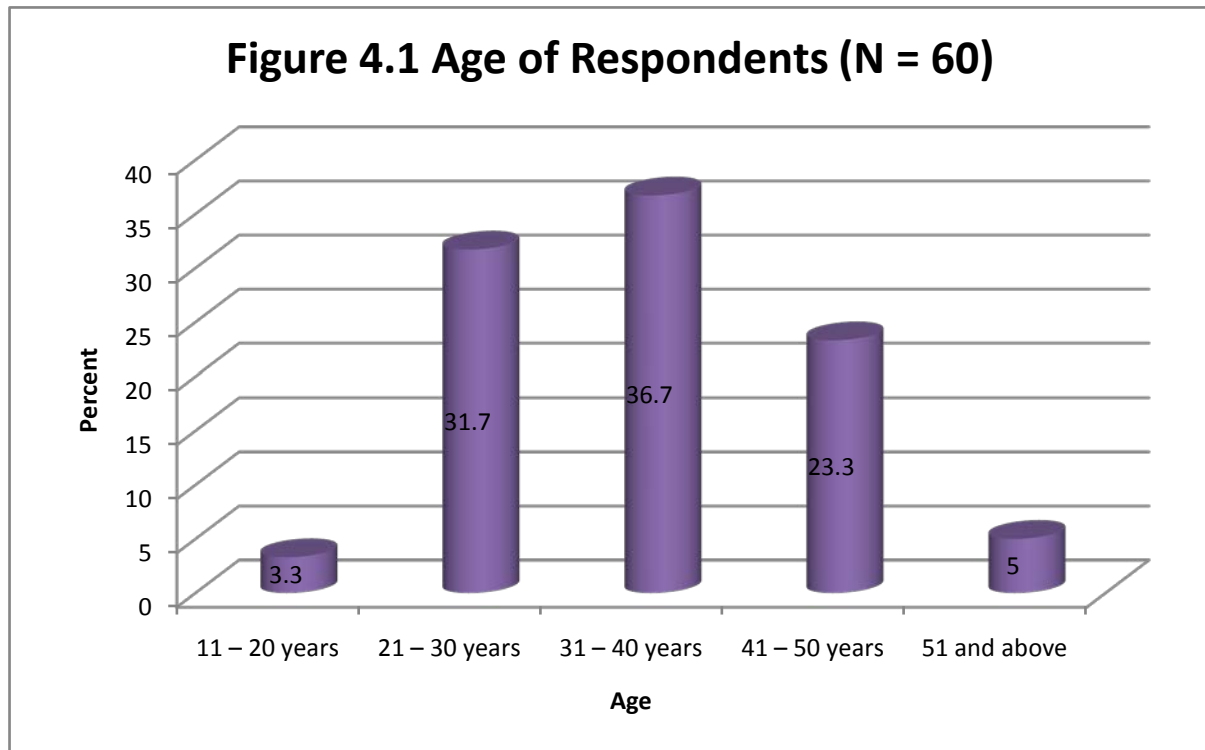
The researcher selected an explorative descriptive survey for this study. The data collection instrument was a questionnaire divided into three sections. Data was collected over a period of four days and 60 respondents participated in the study. The data was analyzed by a statistician using SPSS version 13.0 computer program and the results presented in terms of frequencies and percentages.

#### **4.2 DATA PRESENTATION AND DISCUSSION**

Data was presented in descriptive statistics using frequency counts and percentages, illustrated in pie charts, tables and bar graphs. A total of 60 respondents returned completed questionnaires. The questionnaire was divided into two sections to cover demographic information, the respondents' knowledge about HIV testing and the need to seek treatment.

#### 4.2.1 Respondent's age

The respondents' ages ranged from 19 to 56 years.



As shown in Figure 4.1 above most of the respondents (68.4%) were aged between 21 and 40 years. Only 23.3% (n =14) of the respondents were aged between 41 and 50 years. These results seem to resonate with findings by the MOHCW (2009) which states that 50% of the people living with HIV/AIDS in Zimbabwe are infected during adolescence and young adulthood.

Age was selected in line with the objective of the study to see if there is a correlation between age and health seeking behavior among HIV sero-positive people in Zimbabwe.



#### 4.2.2 Respondents' Gender

Of the respondents, (68.3%: 41) were females and (31.7%: 19) were males. The females significantly outnumbered the males, as shown in Table 4.1 below. According to UNAIDS (2010;61), 52.3% of Zimbabwe's 2007 HIV/AIDS prevalence was made up of females. It has been shown that although African women are thought to be among the most vulnerable when it comes to HIV and AIDS incidence, prevalence and access to treatment, they are more easily taken up in VCTs and ART programmes due to their often close relationship with public health care facilities.

**Table 4.1 Gender statistics (N=60)**

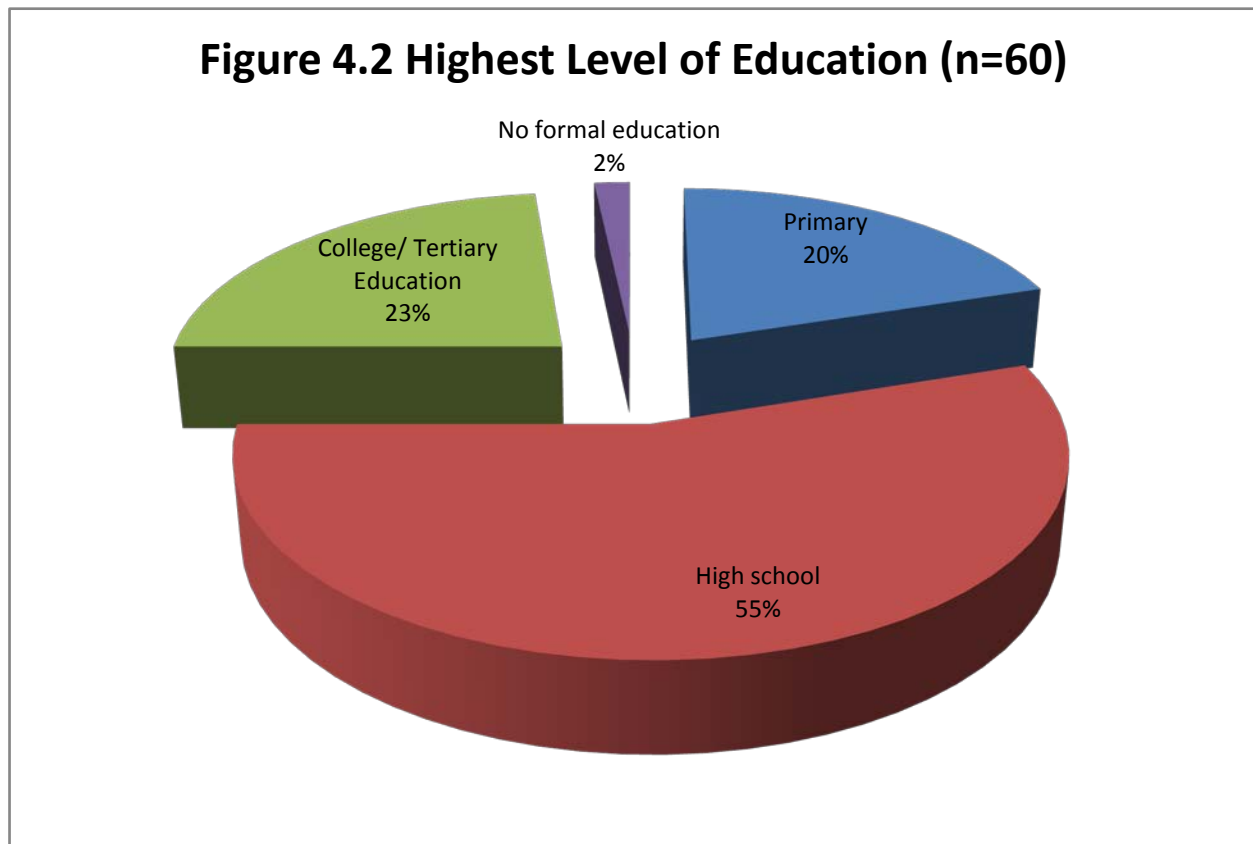
<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	41	68.3
Male	19	31.7
Total	60	100.0

A study conducted at a hospital in Uganda revealed that 68% of the sero positive patients were women compared to only 32% men, Kigozi, Dobkin et al (2009). The researchers partly attributed the high gender disparity to the notion that hospitals and clinics are regarded by most men as 'women's places' due to the high numbers of female staff.

Natras (2008:76) confirms that women are more likely to frequent public health care facilities to care for dependents, access family planning, or due to pregnancy and PTCTP programs. These programs have very strong links to VCT and HAART initiatives.

### 4.2.3 Respondents' highest level of education

Respondents were asked to state their highest level of education. Figure 4.2 sums up the answers which were given by respondents to this question.



A significant percentage of the respondents, 20% (n= 12) had Primary Level as their highest level of education. The majority of the respondents (55%; N= 33) went as far as High School while 23.3% (n=14) had college education (tertiary level). Only 1.7% (n=1) did not have any formal education. Those who had no formal education answered the Ndebele version of the questionnaire. These results are in tandem with Zimbabwe's literacy rate which according to the World Bank (2011: 11) has been pegged at 92%.

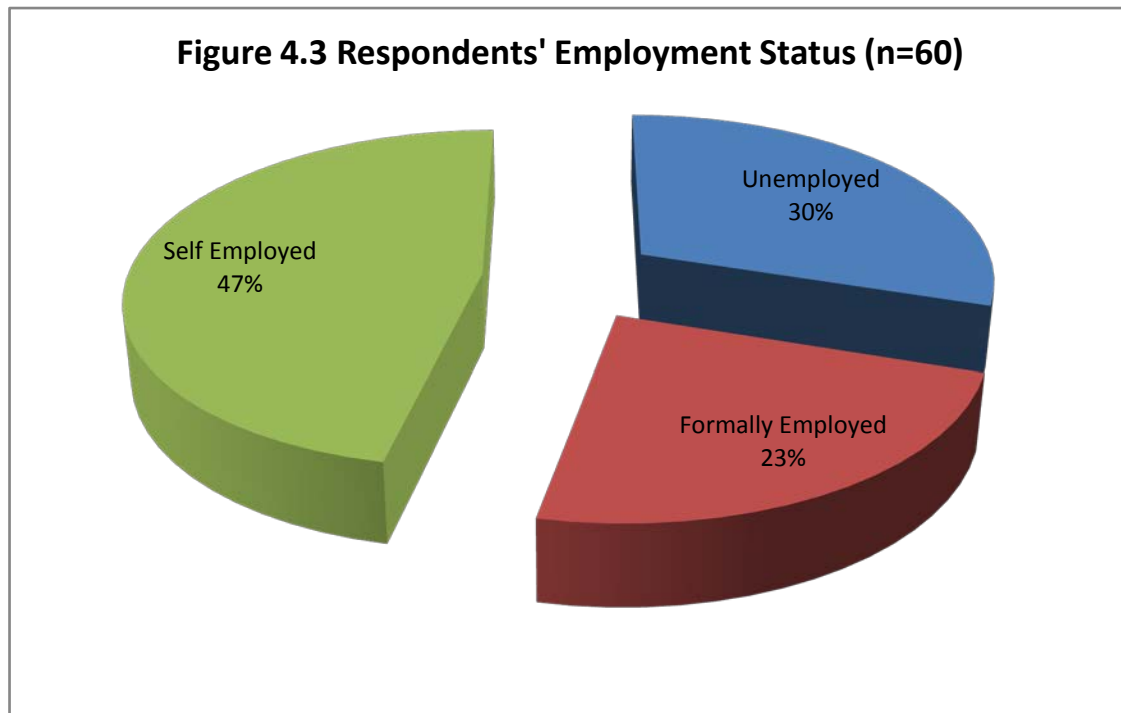
The fact that majority of the patients had secondary education and above is also indicative of their ability to understand the need for ARV treatment and adhere to medication and understand medication instructions. Tania and Jellema (2005:36), referred to education as 'social vaccine' against HIV. More educated young adults especially women are more likely to respond to HIV AIDS information and prevention campaigns and HAART programs. The results from this study where 80% (n=48) of the patients had high school education or more arguably resonates with results from other studies as cited above.

In a study by Kigozi and Isaac (2009:61), adds that in Uganda it was found that 42% of those with no secondary education presented late while 33% of those with some secondary education or more presented early.

#### **4.2.4. Respondents' Employment status**

Individuals in formal employment are exposed to HIV AIDS programs done at work places. This increases their ability to cope with being positive and are therefore; more likely to enter into HAART programs early than those who are unemployed. Most formal employment in Zimbabwe comes with some form of health insurance and this increases the likelihood of one seeking hospitalization as costs are covered to some extent.

Figure 4.3 below shows the employment status of the respondents in this study.

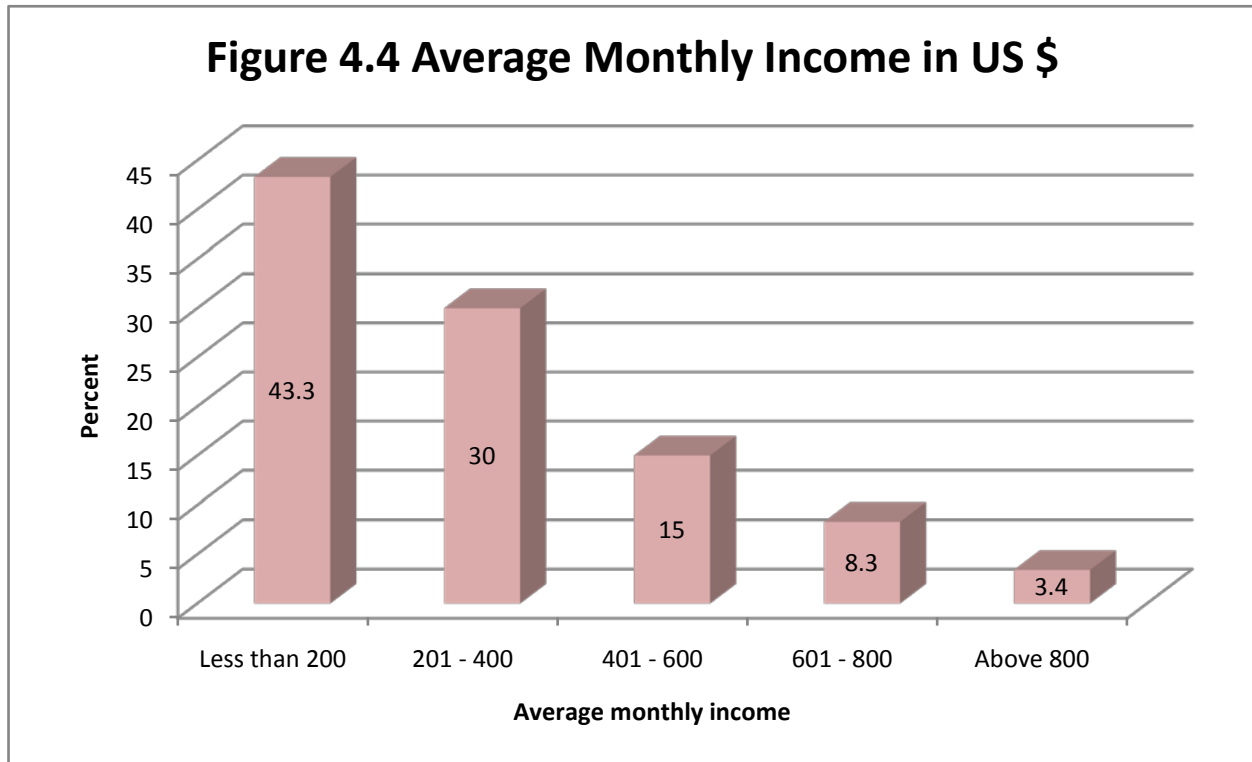


The results indicate that 30% of the respondents were unemployed while as much as 47% were self employed and only 23% were formally employed. Zimbabwe has an unemployment rate which has been estimated to be between 85 to 95% making it one of the highest in Africa, World Bank Report 2010. This estimate however does not factor in those in informal employment or self employment.

#### **4.2.5 Respondents' average monthly income**

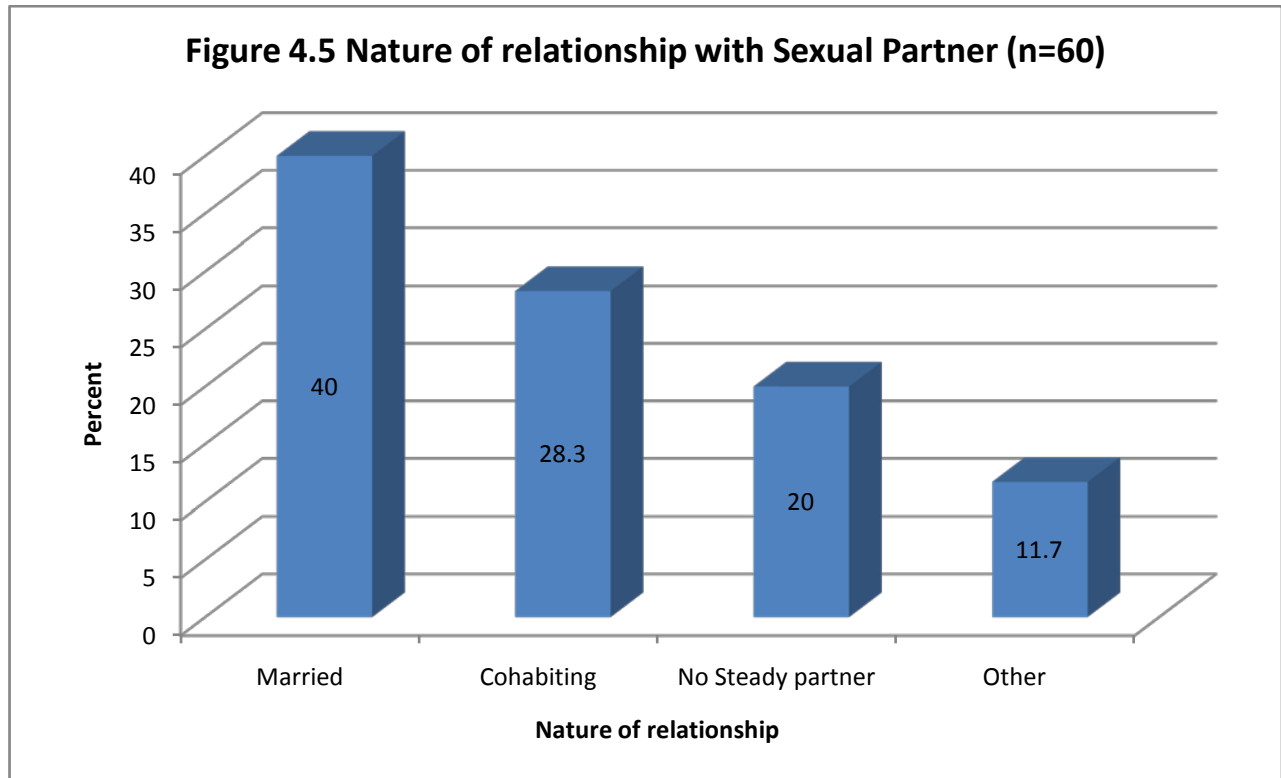
84.9% (n=51) of the patients in this study had a monthly income of less than \$400. This is characteristic of the situation in the Zimbabwean economy. One of the influencing factors is that the study was conducted at a public hospital and most of the patients with higher incomes go to better equipped and well serviced private health care facilities. Increased income levels which are often coupled with higher education levels tend to

minimize delay in entry into medical treatment by HIV sero-positive people and even those with another malady.



#### 4.2.6 Nature of relationship with current sexual partner

Being married was associated with early presentation 40% (n=24) as compared with being single, separated or widowed particularly among women.



About 28.3 % (n=17) of the respondents were cohabiting. Cohabiting is associated with early presentation. Cohabitants regard their situation as risky hence the likelihood to seek medical care early once diagnosed of HIV. They also hardly consult with their partners before making such a decision. 2 of the 7 respondents (28.6%) never married and did not have a sexual partner in the last 3 years.

#### 4.2.7 Knowledge of HIV positive status

Respondents were asked to disclose whether their sexual partner or partners were aware of their sero-positive status. While only 38.3% (n = 23) of the patients had in one way or the other disclosed that they were HIV positive to their partners, 61.7% (37) chose not to let their partners know about their sero-positive status. Among the married

people, those who did not disclose their HIV status to their spouses were more likely to present late compared with those who disclosed particularly among men.

#### **4.2.8 Health Insurance**

Only 31.6% (n=19) of the respondents have medical aid scheme or some form of health insurance while as much as 68.3% (n=41) did not have any form of health insurance .The respondents who had some form of health insurance were further divided as follows: 63% (n=12) were formally employed and 5% (n=3) were dependents of a formally employed individuals while 6.7% (4) were self employed. Having health insurance increases the likelihood of seeking treatment early as it eliminates barriers such as cost. When combined with other factors such as being employed, having reached at least high school education, having health insurance becomes a significant predictor to early presentation among HIV sero-positive patients in this study.

#### **4.2.9 Period of time after Testing HIV Positive**

Respondents were asked to state how long it has been since testing HIV positive. The respondents' answers to this question are presented in the figure 4.5 below.

**Table 4.2 Period Since Testing HIV Positive (N = 60)**

<b>Period since testing HIV Positive</b>	<b>Frequency</b>	<b>Percentage</b>
Between zero and 1 year	4	6.7
Between 1 to 2 years	7	11.7
Between 2 to 3 years	13	21.7
Between 3 to 4 years	10	16.7
Between 4 to 5 years	9	15
Between 5 to 6 years	5	8.3
Between 6 to 7 years	5	8.3
Between 7 to 8 years	4	6.7
More than 8 years	2	3.3
Do not remember	1	1.6

Only 6.7% (n=4) of the respondents had tested HIV positive one year from the period this study was being conducted. Most of the patients 39.1% (n=30) became aware of their HIV positive status between 1 to 4 years prior to this study. This study confirms the late entry of patients into HIV medical care.

#### **4.2.10 Seeking Medical Treatment**

This question sought to find how long the respondent took before presenting his or herself to the hospital/clinic seeking treatment for HIV AIDS related illness for the first time after testing positive.



**Table 4.3 First Presentation at Health Facility After Testing HIV Positive (N = 60)**

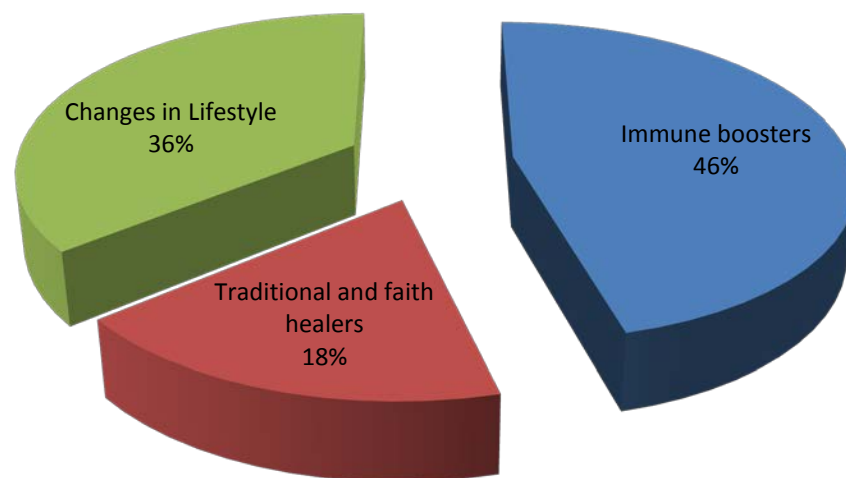
<b>First presentation at health Facility after testing positive</b>	<b>Frequency</b>	<b>Percentage</b>
Between zero and 1 year	17	28.3
Between 1 to 2 years	15	25
Between 2 to 3 years	10	16.7
Between 3 to 4 years	6	10
Between 4 to 5 years	3	5
Between 5 to 6 years	5	8.3
Between 6 to 7 years	2	3.3
Between 7 to 8 years	1	1.7
More than 8 years	1	1.7
Total	60	100

The majority of respondents 53.3% (n=42) entered medical treatment within two years after testing positive. These results do not however show how far the disease had progressed at the time of testing or whether there were other ailments which may have contributed to hospital visits. According to UNGASS Report (2010), the numbers of adults and children accessing HAART were 148 144 (39.7%) in December 2008 and 215 109 (56.8%) in November 2009 in Zimbabwe. The results of this study show a similar trend as in the UNGASS 2010 Report on Zimbabwe. As the OI/HAART program is being scaled up and decentralized there seems to be an increase of HIV AIDS patients who enter into medical treatment.

#### 4.2.11 Alternative forms of treatment.

As much as 65% (n=39) of the respondents had used some non medical form of treatment while 35% (n=21) of the respondents did not report using any form of alternative treatment. Table 4.11 shows the various forms of treatment alternatives which were used by 65% (n=39) of the respondents. 20% (n=18) of the respondents reported having used immune boosters such as garlic and 'muringa' a local herb before beginning medical treatment. As much as 11.7% (n=7) had visited with traditional and spiritual healers to receive both physical and emotional support to cope with their newly discovered sero-positive status. A significant percentage (23.3% n=14) of the respondents reported having made huge adjustments to their diet. This includes reducing or eliminating cigarette smoking and alcohol consumption as well as increasing intake of fruits and high protein foods. Perhaps the alternative coping mechanisms such adjustments in diet, use of immune boosters and consultation with traditional and spiritual healers explains some of the delay in seeking medical treatment.

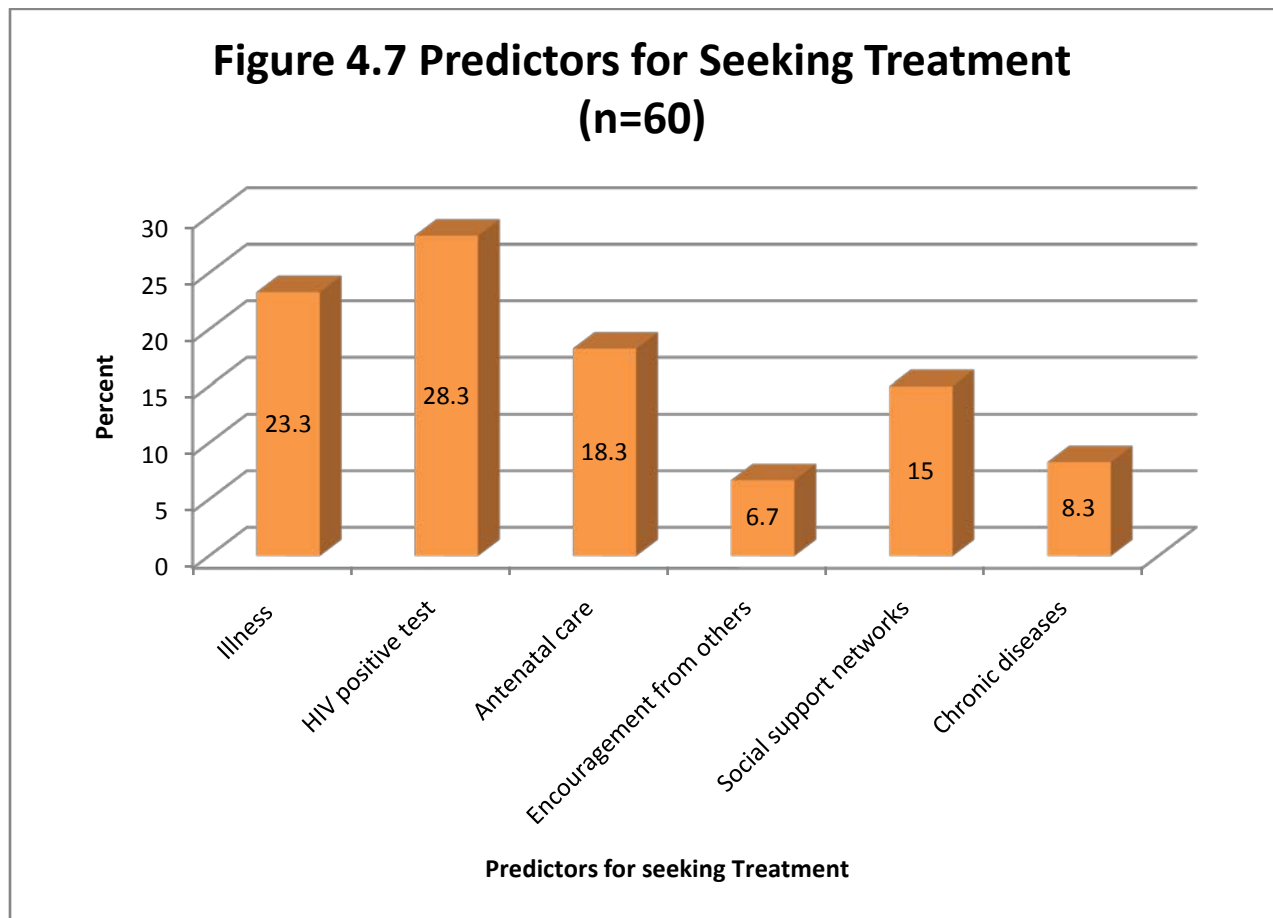
**Figure 4.6 Alternative Forms of Treatment  
(n=39)**



#### **4.2.12 Predictor for seeking Medical Treatment (n=60)**

When respondents were asked what triggered them to seek medical treatment 40% (n = 24) of them reported that they did seek treatment after getting sick while 28% (n= 17) reported they only did so after testing HIV sero positive they knew that they had to present themselves to hospitals and clinics to have a CD+ count and if need be begin treatment. 15% (n=9) of the respondents entered treatment during pregnancy this was soon after testing HIV positive during routine antenatal checkups. 5% (n=3) of the respondents entered into treatment as a result of encouragement from partner, friend, work mate or family member. 10% (n=6) began seeking for medical treatment as a result of information they received through print and electronic media while 5% (n=3) were triggered to seek treatment as a result information obtained through social support networks such as HIV AIDS support groups, churches, work places and colleges. 13.3% (n=8) of the respondents began treatment for HIV AIDS related illness during their routine hospital visits for chronic diseases such as tuberculosis, diabetes etc.

Figure 4.7 below is a summary of these results.



### 4.3 CONCLUSION

This chapter discussed the data analysis systematically according to the items in the questionnaire. Data was analyzed using frequency distributions and percentages in pie charts, tables and bar graphs. Reference was made to the literature reviewed where applicable.

Chapter 5 summarizes the findings, briefly discusses the conclusions and limitations of the study and makes recommendations for practice and further research.

## **CHAPTER 5**

### **FINDINGS, LIMITATIONS AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

Chapter 4 discussed the results of the study with reference to the literature review. This chapter briefly outlines the purpose of the study, discusses the findings and limitations of the study, and makes recommendations for practice and further research.

#### **5. 2 METHODOLOGY**

In this study the researcher used the quantitative approach which requires objective analysis based on observation of social reality. The main feature of quantitative design used in this study is the focus specifically on the research questions which sought to describe and explore the predictors of delayed presentation to care by HIV positive persons in Bulawayo Zimbabwe.

The rationale for this study was to measure the research variable (factors associated with delayed presentation to care by HIV positive people in Bulawayo Zimbabwe) using numerical scale, in line with the ideology of positivism, logical reasoning was applied for structuring sections of the dissertation accordingly, that is following systematically the research process. Deductive reasoning was employed for the development of items of data collecting instrument. A structured data collection instrument was used as a measure for the enhancement of objectivity and to facilitate data analysis.

## **5.3 DISCUSSION**

### **5.3.1 Age Distribution of Respondents**

The demographic data revealed that the respondent's ages ranged from 19 to 56 years. The results indicated that older patients were more likely to visit medical facilities for care of other chronic diseases such as diabetes, asthma and hypertension. This therefore increases the number of older patients who presents themselves early into medical care for HIV AIDS. The same can be said about women who are in child bearing age. They visit medical care facilities for family planning purposes and antenatal routine visits. In Zimbabwe it is government policy that every pregnant woman be tested for HIV and receives counseling. Early diagnosis and early entry into medical care for HIV positive women in child bearing age group is therefore enhanced through these programs.

### **5.3.2 Respondents' Gender**

Of the respondents, (68.3%: 41) were females and (31.7%: 19) were males. The females significantly outnumbered the males. The results seem to resonate with reports from UNAIDS (2008:89), which stated that 52.3% of Zimbabwe's 2007 HIV/AIDS prevalence was made up of females. According to Abrahams (2000: 1191), cultural and socio-economic factors have been implicated as obstacles to women's acquisition of knowledge about HIV disease and treatment options and this may contribute to delays in seeking treatment. It has however been shown that although African women are thought to be among the most vulnerable when it comes to HIV and AIDS incidence, prevalence and access to treatment, they are more easily taken up in VCTs and ART programs due to their often close relationship with public health care facilities.

In a study done by Raveis *et al* (2008: 556), it was revealed that the most common barriers to seeing a physician for HIV infection arose out of both men and women's psychological responses upon learning their sero-status including: denial and associated cognitive distortions of the significance of their status, experiencing paralyzing fear and anxiety about having the illness.

### **5.3.3 Respondent's Highest Level of Education**

Education plays a significant role in the fight against HIV/AIDS. While its role as a 'social vaccine' as far as prevention is concerned is largely debatable there seems to be a general consensus among researchers of the positive role of education in responding to the revelation that one is HIV positive. Those who have attained at least high school education tend to seek treatment earlier largely because of their being aware that being positive is not necessarily a death sentence.

In this study the majority of the respondents 78.3% (n=47) had high school education or higher. The assumption is that the more educated an individual is the more likely that person is going to enter into HIV/AIDS medical care early. This is however not always the case.

### **5.3.4 Respondent's Employment status**

Most employers have HIV/AIDS programs of some sort which they offer to their employees. This then increases awareness among employees thereby increasing the probability of early entry into HIV/AIDS medical care among those who are infected. In this study though only 47% (n=28) of the respondents were formally employed. A significant percentage of those in formal employment worked for very small

organizations which may not have been offering HIV/AIDS programs for their employees. The shrinking of the economy over the past decade has significantly reduced the number of large corporate employers which are associated with HIV/AIDS programs.

### **5.3.5 Respondent's Average Monthly Income**

WHO (2010:4) reports that as much as 55% of Zimbabwe's population live below the food poverty line. Incomes are very low in Zimbabwe. 43.3% (n = 26) of the respondents had a monthly income of less than \$200. When their obligations such as care for dependents, monthly utility bills, rent, food, education and transportation costs it becomes clear that they struggle to make ends meet. It can be inferred that they have difficulties in sustaining their families and transporting themselves to health facility for medical treatment. This lack of money for transportation and sustenance has implication in late entry into medical care. Under these circumstances testing HIV positive alone without the development of severe complications may not be strong reason enough to seek medical care.

### **5.3.6 Nature of relationship with current sexual partner**

The study showed that 40% (n= 24) were married, 28% (n= 17) were cohabiting while 20% (n =12) had no steady partner. Being married was associated with early presentation 40% (n=24) as compared with being single, separated or widowed particularly among women.



### **5.3.7 Knowledge of HIV positive status**

Respondents were asked to disclose whether their sexual partner or partners were aware of their sero-positive status. While only 38.3% (n = 23) of the patients had in one way or the other disclosed that they were HIV positive to their partners, 61.7% (37) chose not to let their partners know about their sero-positive status. Among the married people, those who did not disclose their HIV status to their spouses were more likely to present late compared with those who disclosed particularly among men.

### **5.3.8 Health Insurance**

According to Ministry of Health and Child Welfare (2010:6) only 10% of Zimbabwe's population has medical insurance. Having health insurance increases the likelihood of seeking treatment early as it eliminates barriers such as cost. When combined with other factors such as being employed, having reached at least high school education, having health insurance becomes a significant predictor to early presentation among HIV sero-positive patients in this study.

### **5.3.9 Length of Time since testing HIV positive**

Only 6.7% (n=4) of the respondents had tested HIV positive one year from the time this study was being conducted. Most of the patients 39.1% (n=30) became aware of their HIV positive status between 1 to 4 years prior to this study.

### **5.3.10 First presentation at Health Facility seeking treatment for HIV/AIDS**

According to UNGASS Report (2010), the numbers of adults and children accessing HAART were 148 144 (39.7%) in December 2008 and 215 109 (56.8%) in November 2009 in Zimbabwe. The results of this study show a similar trend as in the UNGASS 2010 Report on Zimbabwe. As the OI/HAART program is being scaled up and decentralized there seems to be an increase of HIV AIDS patients who enter into medical treatment. The majority of respondents 53.3% (n=42) entered medical treatment within two years after testing positive.

### **5.3.11. Alternative forms of treatment (Coping Mechanisms)**

The study found out that as much as 65% (n=39) of the respondents had used some non medical form of treatment. Perhaps the alternative coping mechanisms such adjustments in diet, use of immune boosters and consultation with traditional and spiritual healers explains some of the delay in seeking medical treatment.

### **5.3.12 Predictor for seeking Medical Treatment**

As low as 28% (n=28) of the respondents entered into HIV/AIDS medical care upon realizing that they tested HIV positive. The majority of the respondents only sought medical attention after being triggered by other factors such as sickness and routine visits to medical facilities for other conditions. Much still needs to be done to increase the percentage of the population who enter into HIV/AIDS medical care prior to the development of symptoms of AIDS. Social support networks such as churches, workplaces, family and health promotion activities need to be enhanced since as much as 10% (n=6) of the respondents in this study attributed their entry into HIV/AIDS medical care to these institutions and activities. This study also revealed that routine

medical care for conditions such as tuberculosis, diabetes, heart diseases and hypertension is a good trigger for early entry into HIV/AIDS medical care.

#### **5.4 LIMITATIONS OF THE STUDY**

The study was limited to one public hospital in Bulawayo Zimbabwe, consequently the findings cannot be generalized to HIV AIDS patients in the whole city or in the whole country. Patients at private hospitals did not participate in the study. The study relied on hospital records as well as the honesty of the respondents to provide accurate and authentic information about themselves.

#### **5.5 RECOMMENDATIONS**

Recommendations for this study have been categorized according to health/ nursing practice, health promotion and health research.

##### **5.5.1 Recommendations to Nursing/Health Practice**

- The counseling component in VCT needs to be strengthened so that people who are diagnosed with HIV are encouraged and supported to enter into medical treatment early well before the onset of clinical symptoms. It may be very helpful as well for HIV tests and counseling to be part of routine procedure during visits to hospitals by patients suffering from chronic diseases such as diabetes, hypertension and coronary diseases.
- HIV testing programs may accelerate initiation of HIV care by encouraging disclosure to partners upon positive diagnosis.

- Findings from this study suggest that potential interventions in Bulawayo Zimbabwe whether designed to promote HIV testing or early entry into care, should target men, unmarried and older women, and those of lower socio-economic status.

### **5.5.2 Recommendations to Health Promotion**

- There is need for conventional medicine to work in collaboration with traditional medicine and religion. Traditional healers and pastors should be well informed about HIV/AIDS and information communicated to patients should be consistent. It would make a huge difference if all or most of the traditional and religious leaders understand HAART and encourage their followers who may be HIV positive to enter early into medical treatment.
- The advantages of early entry into medical care need to be communicated extensively to the entire population. Due to the strong socio-economic, family and cultural ties that connect and influence people, a family member, a friend, spouse or workmate who understands the advantages of early entry into medical care may easily influence another person to seek medical attention early.
- The researcher further recommends that the Ministry of Health and Child Welfare (MOHCW) and the Ministry of Health make facts about HAART and the advantages of early commencement of it an integral part of the HIV AIDS curriculum in schools.
- Government and other stake holders need to promote and encourage medical insurance since those with it tend to enter into HIV care earlier than those without.

### 5.5.3 Recommendations to health research

- A research study exploring the knowledge of religious and traditional leaders on HIV/AIDS.
- A research study on the exploration and beliefs of other health workers other than physicians on the advantages of early entry into HAART and where and how it can be accessed.
- It is further recommended that a wide scope of this study be developed as the current study captures only a small portion of HIV/AIDS infected men and women in Zimbabwe. This future study should include HIV/AIDS infected men and women using the same or modified title.

## 5.6 CONCLUSION

Data presented in this study provided sufficient information in relation to the research question and objectives of the study. The researcher explored the respondents' opinions within the context of culture and socio-economic factors as challenges associated with delayed entry into HIV care. Most respondents attempted to provide relevant answers which enabled the researcher to come up with concrete recommendations. Hopefully health professionals and those in authority will increase their efforts to develop more comprehensive counseling and support for HIV/AIDS infected people in Zimbabwe.

The study found out that as much as 71.6% (n =43) first entered HIV care more than 12 months after testing HIV positive while 40% (n = 24) did so as a result of illness. Being diagnosed HIV positive is therefore not necessarily a strong reason enough for one to immediately enter into medical care. Intensive health education needs to be done at work places, health facilities, schools, through print and electronic media, churches and

other community settings to equip the population with knowledge of the advantages of early entry into HIV care.

Low education levels, unemployment and being single are associated with delayed entry into HIV medical care. A percentage of the population use and trust non-biomedical approaches to dealing with HIV/AIDS. There is therefore a strong need to harmonize the two approaches.

## LIST OF REFERENCES

Abe, M. Macher, Eric P. 2006. "*Acquired immune deficiency syndrome (AIDS)*", in AccessScience@McGraw-Hill, <http://www.accessscience.com>, DOI 10.1036/1097-8542.007175.

Abrams, McBain and Fawzi. 2005. *Family Centred Approaches to the prevention of vertical transmission of HIV*. Harvard school of public health. Available on [www.ccba.org/up-content/uploads](http://www.ccba.org/up-content/uploads).

Abrams, D.I. 2000. *Alternative therapies in HIV infection*. AIDS, 4, 1179 – 1189.

Adèr, HJ & Mellenbergh, DJ. 2008. *Advising on Research Methods: A consultant's companion* (pp. 305-332). Huizen, The Netherlands: Johannes van Kessel Publishing.

Ajzen, I. 2002. *Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior*. Journal of Applied Social Psychology, 32, 665-683.

Ajzen, I. 2004. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

Ajzen, I. 2005. From intentions to actions: A theory of planned behavior. In J. Kuhl., & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.

Ajzen, I. 2005. *Laws of human behavior: Symmetry, compatibility, and attitude-behavior correspondence*. In A. Beauducel, B. Biehl, M. Bosniak, W. Conrad, G.

Ajzen, I. 2008. *Consumer attitudes and behavior*. In C. P. Haugtvedt, P. M. Herr & F. R. Cardes (Eds.), *Handbook of Consumer Psychology* (pp. 525- 548). New York: Lawrence Erlbaum Associates.

Ajzen, I., & Manstead, A. S. R. (2007). *Changing health-related behaviors: An approach based on the theory of planned behavior*. In K. van den Bos, M. Hewstone, J. de Wit, H.

Schut & M. Stroebe (Eds.), *The scope of social psychology: Theory and applications* (pp. 43-63). New York: Psychology Press.

Available on [www.thewashingtonpost@newspaperdirect.com](mailto:www.thewashingtonpost@newspaperdirect.com)

Babbie, E & Mouton, J. 2001. *The practice of social research*. Cape Town: Oxford University Press.

Babbie, E, and Mouton, J 2001. *The practice of social research*. Oxford: Oxford University Press.

Ban Ki-moon op-ed (2008, 6th "The Stigma Factor", The Washington Times  
Belmont Report 1979. *The Belmont report: ethical principles for the protection of human subjects of research*. Available on  
<http://hhs.gov/ohrp/humansubjects/guidance/Belmont.html>.

Bennett, P., & Bozionelos, G. (2000:79). *The theory of planned behaviour as predictor of condom use: A narrative review*. Psychology Health & Medicine, 5, 307-326.

Brink, H, Vander Walt, C & Van Rensburg, G. 2006. *Fundamentals of research methodology for health care professionals*. 2<sup>ND</sup> edition, Kenwyn: Juta.

Brink, H. Van der Walt, C & Van Rensburg, G. 2006. *Fundamentals of research methodology for health care professionals*. 2<sup>nd</sup> edition. Kenwyn: Juta.

Bunnell R *et al.* 2008. *HIV transmission risk behavior among HIV-infected adults in Uganda: results of a nationally representative survey*. AIDS, 22:617–624.

Burns, N & Grove, SK. 2001. *The practice of nursing research: conduct, critique and utilization*. 4<sup>th</sup> edition. Philadelphia: Saunders.



Burns, N & Grove, SK. 2007. *Understanding nursing research*. St. Louis: Saunders.

Chen RY, Westfall AO, Accort NA, et al. *Distribution of health care expenditures for HIV-infected patients*. Clin Infect Dis. 2006;42:1003- 1010.

Chen, I Ju. 2007:13, Factors associated with delayed diagnosis of tuberculosis *Journal of college teaching and learning* – November 2007, Vol 4. Number 11. Chal University of Technology, Taiwan.

Cogan J, Herek G. Stigma. In Smith RA (editor). (2009). *Encyclopedia of AIDS: a social, political, cultural, and scientific record of the HIV epidemic*. Chicago: Fitzroy Dearborn.

Cooke, R., & Sheeran, P. (2004). *Moderation of cognition-intention and cognition-behaviour relations: A meta-analysis of properties of variables from the theory of planned behaviour*. British Journal of Social Psychology, 43, 159-186.

Corruption burns universal access: *Report on Corruption and access to treatment*. Available on: [www.aidsportal.org/Article\\_Details.aspx?ID=1425](http://www.aidsportal.org/Article_Details.aspx?ID=1425).

Cuerrier, J. P., Deshaies, P., Mongeau, C., Luc, P. G., & Vallerand, R. J. (1992). *Ajzen and Fishbein's theory of reasoned action as applied to moral behavior: A confirmatory analysis*. Journal of Psychology, 62 (1), 98-109.

Dennil, K, King. L & Swanepoel, T. 1999. *Aspects of Primary Health Care*. Johannesburg: Thompson.

Eagly, A. H., & Chaiken, S. 1993. *The psychology of attitudes*. Fort Worth: Harcourt Brace Jovanovich College Publishers..

Hangjie Liu, Xiaojing Li, Erjian M.A. 2009, Stigma, Delayed Treatment and Spousal Notification Among Male STD patients in China. University of California, Los Angeles, USA.

Kigozi M. and Isaac 2009. *Late disease stage presentation to an HIV clinic in the era of free antiretroviral therapy in sub-Saharan Africa*. Journal of Acquired Deficiency Syndrome, 2009 October. 52(2). New York.

Kitahata MM, Gange SJ, Abraham AG, Merriman B et al. 2009. Effect of early versus deferred therapy for HIV. *New England of medicine*. 360:1815.

Krawczyk CS, Funkhouser E, Kilby JM, Kaslow RA, Bey AK, Vermund SH. 2006. *Factors associated with delayed initiation of HIV medical care among infected persons attending a southern HIV/AIDS clinic*. South Medical Journal 2006. May:99(5) 472-48.

LoBiondo-Wood, G & Haber, J. 2001. *Research in nursing, methods, critical evaluation and use*. Rio de Janeiro: Guanabara Koogan.

Mail & Gurdian 12 April 2010.

Marks R. Allegrante JP. 2005. *Chronic Osteoarthritis and adherence to exercise: A review of the literature*. Journal of aging and physical activity 13:434-460.

Mataure, P, Ray, S, Foreman, M & Scalway, T. 2001. *Men and HIV in Zimbabwe*. Harare. SAFAIDS, PANOS & UNAIDS, Zimbabwe.

McDonald AM, Li Y, Dore GJ, Ree H, Kaldor JM. *Late HIV presentation among AIDS cases in Australia, 1992 – 2001*. Australian and New Zealand Journal of Public Health 2003;27 (6): 608-613 [PubMed:14723408].

Ministry of Health and Child Welfare, 2004 *The HIV and AIDS epidemic in Zimbabwe*. Harare: Government Printer.

Ministry of Health and Child Welfare, 2004. *The HIV and AIDS epidemic in Zimbabwe*. Harare. Government Printer.

Ministry of Health and Child Welfare. 1999. *National HIV/AIDS Policy*. Harare: Government Printer.

Ministry of Health and Child Welfare. 2010. *Zimbabwe national HIV estimates 2009*. Harare, Government Printer.

Nachamias - CF and Nachamias D. 2001. *Research methods in the social sciences 7<sup>th</sup> Edition*. Worth Publishers.

National Institute of Allergy and Infectious Diseases. 2012. Landmark HIV treatment-as-prevention study demonstrates additional health benefits-cost- effectiveness. Available on: <http://www.niaid.nih.gov/new/releases/2011/Pages/HPTN052.aspx>.

Neuman, WL. 2002. *Social research methods: qualitative and quantitative approaches. 3<sup>rd</sup> edition*. Nedham Heights, NJ: Allyn and Bacon.

Physicians for Human Rights.2009. *Health in ruins a man-made disaster in Zimbabwe. An emergency report by Physicians for Human Rights. January 2009*. Available at [http://s3.amazonaws.com/PHR\\_Reports/health-in-ruins-zim-full-2009.pdf](http://s3.amazonaws.com/PHR_Reports/health-in-ruins-zim-full-2009.pdf).

Polit, D and Beck C. 2004. *Nursing Research: Principles and Methods. 7<sup>th</sup> Edition*. Philadelphia, PA: Lippincott, Williams & Wilkins.

Polit, DF and Beck, CT. 2008. *Nursing research: principles and methods. 7<sup>th</sup> edition*. Philadelphia: Lippincott, Williams and Wilkins.

Raveis V.H, Siegel K. & Gorey E. 2008. Factors associated with HIV-infected Women's delay in Seeking Medical Care, AIDS Care. 2008. Vol. 10, No. 5. 549 -562. Columbia University, New York, USA.

Reporting on 2009 funding matrix by Bilaterals, Multilaterals and International Foundations for Zimbabwe UNGASS 2010 Report.

Samet JH, Freedberg KA, Savetsky JB, Sullivan LM, Stein MD: *Understanding delay to medical care for HIV infection: the long-term non-presenter*. *AIDS* 2001 , **15**(1):77-85.

Saunders, M, Lewis, P. & Thornhill, A. 2003. *Research methods for business students*. Philadelphia: FT Prentice Hall.

Shaikh N and Haroon B 2005. Poverty and labour markets of HIV positive households in South Africa: An exploratory Methodological Analysis. *South African Journal of Economics*. Vol. 73, 578-599.

Schönberger, & D. Wagener (Eds.), *Multivariate research strategies* (pp. 3-19). Aachen, Germany: Shaker Verslag.

Sheppard, B.H., Hartwick, J., & Warshaw, P.R. (1988). *The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research*. *Journal of Consumer Research*, 15, 325–343.

Sherr L et al. (2007). *Voluntary counselling and testing: uptake, impact on sexual behaviour, and HIV incidence in a rural Zimbabwean cohort*. *AIDS*, 21:851–860.

Strydom, H. 2002. Reliability and Validity, in *Research at grass roots: for the social sciences and human services professions*, edited by De Vos AS. Pretoria: Van Schaik.

Tania B and Jellema Anne. 2005. *Deadly Inertia: A cross-country study of educational responses to HIV/AIDS*. Global Campaign for Education.

The International HIV/AIDS Alliance, 2004. *Antiretroviral Treatment in Zamb*.

*The Washington Times*. 06 August 2008.

The World Bank. 2010. *Fourth Report of session 2010 -11 Vol. 1: Report, together with journal minutes, oral and written evidence*, Volume 1. 2010. Geneva Switzerland.

UNAIDS. 2010. *AIDS epidemic update, December 2005*. Joint United Nations Programme on HIV/AIDS. Geneva, Switzerland.

UNAIDS. 2010. *Zimbabwe Report to the United Nations General Assembly on HIV and AIDS – Follow up to the declaration of commitment on HIV and AIDS*. Harare. Zimbabwe.

United Nations Programme on HIV/AIDS. 2010 *HIV/AIDS in Sub-Saharan Africa*. UNAIDS Publications.

*Who. Guidelines for using HIV technologies in surveillance: Selection, Evaluation and Implementation. 2001.*

*Who. Guidelines for intensified tuberculosis case- finding and isoniazid preventive therapy for people living with HIV in resource constrained settings. 2010.*

*WHO. Interim WHO Clinical Staging of HIV/AIDS AND HIV/AIDS Case Definitions for Surveillance. 2005.*

WHO/UNAIDS/UNICEF. 2010. *Towards universal access: scaling up priority HIV/AIDS interventions in the health sector*. Available on

[www.aidsportal.org/Article\\_Details.aspx?ID=1425](http://www.aidsportal.org/Article_Details.aspx?ID=1425)

[www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreportssubmittedbycountries/zimbabwe\\_2010\\_country\\_progress\\_report\\_en\\_pdf](http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreportssubmittedbycountries/zimbabwe_2010_country_progress_report_en_pdf)

[www.who.int/hiv/pub/2010progressreport/en/index.html](http://www.who.int/hiv/pub/2010progressreport/en/index.html)

Yates D, Darren S, Starness, Moore David. 2008. *Statistics through applications*. WH Freeman.

Zimbabwe Lawyers for Human Rights. 2010. *The Legal Monitor*, 3 June 2010. Harare, Zimbabwe.

Zimbabwe National AIDS Council. 2003. *Zimbabwe National Aids Council Bulletin 1. (1): 1-16*, Harare Zimbabwe

## **ANNEXURE 1: INFORMED CONSENT FORM**



### **UNIVERSITY OF SOUTH AFRICA COLLEGE OF HUMAN SCIENCES**

#### **CONSENT TO PARTICIPATE IN RESEARCH**

#### **Determinants of late disease stage presentation after diagnosis of HIV infection in Bulawayo Zimbabwe.**

You are asked to participate in a research study conducted by Tasara Makasi a student in the College of Human Sciences at the University of South Africa. The results of the study will contribute to the dissertation.

If you have any questions or concerns about the research, please feel free to contact Tasara Makasi on 0912100487 as well as [35135646@mylife.unisa.ac.za](mailto:35135646@mylife.unisa.ac.za) or his supervisor Dr LM Modiba on email address [Modiblm@unisa.ac.za](mailto:Modiblm@unisa.ac.za)

#### **Purpose of Study**

The purpose of the study is to find out the reasons why people who have been tested HIV positive delay seeking treatment until the disease has progressed to an advanced stage.

## **Procedures**

**If you volunteer to participate in this study we will ask you to do the following things:**

- Disclose your socio-demographic information eg. Age, sex, level of education, marital status, etc.
- Reveal how long it took you before visiting a hospital in relation to your status after being tested.

## **Potential risks and Discomforts**

There are no potential risks or discomforts associated with this study.

## **Potential Benefits to participants and/or to society**

The information gathered will greatly benefit health services providers to address the reasons why HIV AIDS positive people delay seeking treatment.

## **Payment for participation**

There is no payment to be made for participating in this study.

## **Confidentiality**

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study. Information such as your name, national identification number, address and telephone number will not be collected in this study.

**Participation and Withdrawal**

You can choose whether to be in this study or not. You may also choose not to answer any questions you don't want to answer and still remain in this study.

**Signature of Research Participant**

I have read the information provided for the study **Determinants of late disease stage presentation after diagnosis of HIV infection in Bulawayo Zimbabwe.**

The questions I had have been answered satisfactorily and I agree to participate in this study.

Name of participant.....

Signature of participant.....

Date.....

**Signature of Witness**

Name of witness.....

Signature of witness.....Date.....



## ANNEXURE 2: REQUEST TO CONDUCT STUDY AT MPILO CENTRAL HOSPITAL

The Chief Executive Officer  
Mpilo Central Hospital  
Bulawayo  
Zimbabwe

07 January 2011

Dear Dr. L. Mlilo

REF: Request to conduct Study

My name is Tasara Makasi, I am an MPH student at the University of South Africa. I have received consent from the university to undertake research on the following topic, 'Determinants of late disease stage presentation after diagnosis of HIV infection in Bulawayo Zimbabwe'. The purpose of the study is to find out the reasons why people who have been tested HIV positive delay seeking treatment until the disease has progressed to an advanced stage.

The data collection instrument for this study is a questionnaire which will be administered to the patients who will be in the Opportunistic Infections Department on the day of the study. The attached consent form outlines the rights of the patients during the study. I have also attached a copy of the questionnaire for your review. The results of the study will be treated with the highest degree of confidentiality, they will only be made available to UNISA and to your institution should you so wish. It is anticipated that the study will take no more than three hours and would not disrupt the activities of hospital staff or cause discomfort or disturbance to the patients.

It is against this background that I am requesting for permission to conduct this study. I have included my contact details so that should there be need for me to answer any questions you may have you can contact me. I am looking forward to hearing from you at your earliest possible convenience.



Yours Faithfully,  
Tasara Makasi  
Cell 0772100487, [makasit@ldschurch.org](mailto:makasit@ldschurch.org),

# ANNEXURE 3: PERMISSION TO CONDUCT STUDY AT MPILO CENTRAL HOSPITAL

Reference:.....



Telephone:09-212011  
Fax: 09-205978

MINISTRY OF HEALTH  
AND CHILD WELFARE  
MPILOCENTRAL HOSPITAL  
P O BOX 2096

ZIMBABWE

BULAWAYO

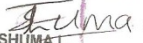
Dear Mr. Tasara Makasi

With reference to your letter dated 07 January 2011, I wish to advise that the hospital board has approved your request to conduct a study in the Opportunistic Infections Department. It is very vital that you pay strict attention to the following conditions as failure to do so may result in the hospital ordering you to immediately stop the study at any time and also take any further action as we see fit.

1. That you call in person a day or two before and report to the sister in Charge at the OI Department to finalize your plans with the staff.
2. You will work under the direction of the sister in Charge on the day of the study.
3. That you do not ask any questions other than the ones on your questionnaire.
4. You are also to see that the rights of the patients are strictly respected as outlined in your consent form.
5. You will have the assistance of 4 student nurses and it is anticipated that your study will not take anything more than 3 hours.

That you share the results of your study should the hospital request that from you.

I wish you the best in your studies.

  
TSHUMA L.  
HUMAN RESOURCES DEPARTMENT  
For Chief Executive Officer

hira/hee ireanyway  
HUMAN RESOURCES ASSISTANT  
2011

## **ANNEXURE 4: ETHICAL CLEARANCE**

### **DRAFT SUMMARY SHEET FOR THE ETHICAL CLEARANCE OF POSTGRADUATE STUDENT PROPOSALS FOR THESES/DISSERTATIONS**

The Higher Degrees Committees in Departments in the College of Human Sciences are reminded that they should make their students aware of the policy for research ethics of UNISA available at:

[http://cm.unisa.ac.za/contents/departments/res\\_policies/docs/ResearchEthicsPolicy\\_aprvCounc\\_21Sept07.pdf](http://cm.unisa.ac.za/contents/departments/res_policies/docs/ResearchEthicsPolicy_aprvCounc_21Sept07.pdf)

In judging postgraduate student proposals, Higher Degree Committees should comment on the methodological, technical and ethical soundness of the proposal and ask students to complete the following summary sheets. Difficult or special cases should be referred to the Ethics Subcommittee of the College of Human Sciences under the chairmanship of Prof Kuzvinetsa Peter Dzvimbo, the Deputy Executive Dean: College of Human Sciences (Tel: 012 429 4067; E-mail: [dzvimkp@unisa.ac.za](mailto:dzvimkp@unisa.ac.za)).

**A. CANDIDATURE DETAILS**

**A1 FULL NAME OF CANDIDATE**

<b>TASARA MAKASI</b>
----------------------

**A2 ACADEMIC AND PROFESSIONAL QUALIFICATIONS**

<b>BSc. Environmental Health</b>

**A3 THESIS/DISSERTATION TITLE**

<b>FACTORS ASSOCIATED WITH DELAYED ENTRY INTO HIV MEDICAL CARE AMONG HIV POSITIVE PEOPLE WHO ARE AWARE OF THEIR STATUS IN BULAWAYO ZIMBABWE</b>

**A4 PERSONAL PARTICULARS**

(a) student number:	35135646
(b) current address:	14605 Ibhalabhala Crescent, Bulawayo, Zimbabwe
(c) e-mail:	<a href="mailto:makasit@ldschurch.org">makasit@ldschurch.org</a> 35135646@mylife.unisa.ac.za
(d) telephone number(s)	263912100487 or 2639888594

**A5 PROMOTER(S)/SUPERVISOR/(S)**

(a) Initials & surname:	Dr LM Modiba
(b) Contact details:	Modiblm@unisa.ac.za
(c) Department:	Health Studies
(a) Initials & surname:	
(b) Contact details:	
(c) Department:	

## **B PROPOSAL SUMMARY SHEET**

### **B1 ABSTRACT OF THE PROPOSAL**

#### **ABSTRACT**

##### **Background**

In many African settings HIV positive people seek treatment very late even if they know their HIV status before the development of AIDS. This study aims to explore the reasons for late entry into medical care among HIV AIDS positive people who are aware of their sero-positiveness. Timely access to care by HIV positive people has the benefit of greatly delaying progression to clinically symptomatic HIV disease. Early entry into medical care may also reduce the likelihood of further spread of infection, both by the decrease in viral replication that results from antiretroviral therapy and by a higher probability that the person will adopt risk reduction behaviors.

##### **Methods and Findings**

A researcher administered questionnaire is used to collect data from patients. Sampled patients at a Hospital in Bulawayo Zimbabwe are the respondents in this study. The questionnaire was translated into local languages of Ndebele and Shona and pre-

tested within the same community.

Univariate analysis will be used to assess the associations between delayed presentation for HIV care and socio-demographic, HIV testing, and behavioral factors. Data collected will be summarized in tables, ratios will be computed and presented both in tabular and graphical forms with comments attached.

### **Conclusion**

There are a number of reasons why HIV positive people who are aware of their being positive delay seeking treatment. One of the single most important predictor for entry into treatment is sickness which for HIV AIDS is unfortunate because there are many advantages of early entry into treatment before the development of clinical symptoms.

## **B2 RESEARCH OBJECTIVES**

This research seeks to provide answers to the following questions:

- Why do HIV positive people who are aware of their status delay in seeking treatment despite the many benefits of early treatment?
- What are the characteristics of those who seek treatment only when they have developed symptoms of HIV AIDS in Bulawayo Zimbabwe?

**B3 RESEARCH DESIGN**

For this study, the researcher selected a quantitative design to measure objectively the variables involved and statistically analyse and interpret the data.

**B4 HOW SHOULD THIS STUDY BE CHARACTERISED?** (Please tick all appropriate boxes.)

Personal and social information collected directly from participants	Yes	No
Participants to undergo physical examination*	Yes	No
Participants to undergo psychometric testing**	Yes	No
Identifiable information to be collected about people from available records (e.g. medical records, staff records, student records, etc.)	Yes	No

**\*For medical or related procedures, please submit an application to a medical ethics committee.**

**\*\*Please add details on copyright issues related to standardized psychometric tests**



**B5 WHAT IS THE AGE RANGE OF THE INTENDED PARTICIPANTS IN THIS STUDY?**

18 years and above

**B5.1 If the proposed participants are 18 years and older, is the informed consent form for participants attached?**

Yes	No	Not applicable
-----	----	----------------

**B.5.2 If the proposed participants are younger than 18 years, are consent and assent forms attached?** (In order for minors -younger than 18 years of age- to participate in a research study, parental or guardian permission must be obtained. For minors a youth assent form is required.)

Yes	No	Not applicable
-----	----	----------------

**B5.3 Description of the process for obtaining informed consent (if applicable)**

**Proposed participants are verbally given a full description of the purpose of the study, assured of confidentiality and that no payment is given to them and then their consent is requested for them to participate in the study. They then sign the consent form.**

B6. DESCRIPTION OF THE RISKS POSED BY THE PROPOSED STUDY WHICH RESEARCH PARTICIPANTS MAY/WILL SUFFER AS WELL AS THE LEVEL OF RISK (please consider any discomfort, pain/physical or psychological problems/side-effects, persecution, stigmatisation or negative labeling)

There is no risk associated with the study

**B7. DESCRIPTION AND/OR AMOUNTS OF COMPENSATION INCLUDING REIMBURSEMENTS, GIFTS OR SERVICES TO BE PROVIDED TO PARTICIPANTS (IF APPLICABLE)** (Will the participants incur financial costs by participating in this study? Will incentives be given to the participants for participation in this study? )

Not applicable

**B8. DESCRIPTION FOR ARRANGEMENT FOR INDEMNITY (IF APPLICABLE)****B9. DESCRIPTION OF STEPS TO BE UNDERTAKEN IN CASE OF ADVERSE EVENTS OR WHEN INJURY OR HARM IS EXPERIENCED BY THE PARTICIPANTS ATTRIBUTABLE TO THEIR PARTICIPATION IN THE STUDY**

Not applicable
----------------

**C. CANDIDATE'S STATEMENT AGREEING TO COMPLY WITH ETHICAL PRINCIPLES SET OUT IN UNISA POLICY ON RESEARCH ETHICS**

I, Tasara Makasi..... declare that I have read the policy for research ethics of UNISA and that this form is a true and accurate reflection of the methodological and ethical implications of my proposed study. I shall carry out the study in strict accordance with the approved proposal and the ethics policy of UNISA. I shall maintain the confidentiality of all data collected from or about research participants, and maintain security procedures for the protection of privacy. I shall record the way in which the ethical guidelines as suggested in the proposal has been implemented in my research. I shall work in close collaboration with my promoter(s)/supervisor(s) and shall notify my promoter(s)/supervisor(s) in writing immediately if any change to the study is proposed. I undertake to notify the Higher Degrees Committee in writing immediately if any adverse event occurs or when injury or harm is experienced by the participants attributable to their participation in the study.



(Signature):

(Date): 15 JUNE 2010

**D. OBSERVATIONS BY THE HIGHER DEGREES COMMITTEE OF THE DEPARTMENT**

D1. Is the proposal of an acceptable standard?

**YES**

**NO, IT SHOULD BE REFERRED BACK TO THE CANDIDATE**

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

D2 Are all reasonable guarantees and safeguards for the ethics of this study covered?

**YES**

**NO, IT SHOULD BE REFERRED BACK TO THE RESEARCHER**

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

We have reviewed this completed Summary Sheet and are satisfied that it meets the methodological, technical and ethical standards as set in our Department and that it is in compliance with the UNISA policy on research ethics.

Signed:	
Name:	
Date:	

## ANNEXURE 5: QUESTIONNAIRE

---

### Questionnaire

---

#### Instructions for Completing the Questionnaire

For questions 1 through 9 please mark X on one of the boxes for each question to indicate your answer. From question number 10 through 13 please give a brief explanation.

#### 1. Sex:

- Male                       Female

#### 2. Age in years:

- 18 - 20
- 21-30
- 31-40
- 41-50
- Over 51

**3. Highest level of education.**

- Primary school
- High School
- Tertiary education
- No formal education at all

**4. Are you employed?**

- Yes
- No

**If Yes:**  Formally employed  Self-employed

**5. What is your average monthly income? (Include pension, public assistance, support from family/friends, etc.)**

- Less than \$100
- \$100 - \$400
- \$401- \$800
- Above \$800

**6. Marital status**

- Single

- Married
- Divorced
- Widowed

**7. What kind of relationship do you have with your sexual partner?**

- Formally married,
- Co-habiting,
- No steady partner.
- Other (give details).....  
.....

**8. Between you and your partner who came to know of his or her status first?**

- Me
- My Partner
- I do not know.

**9. When were you tested HIV positive? (Specify period in months or years)**

.....  
.....



**10. How long ago did you first seek treatment for HIV AIDS? (Specify period in months and or years)**

.....  
.....

**11. State one reason why it took you this long before seeking treatment.**

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

**13. What triggered you to seek for HIV AIDS treatment?**

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