FACTORS ASSOCIATED WITH DELAY IN SEEKING
ANTIRETROVIRAL THERAPY IN ZIMBABWE: CROSS – SECTIONAL STUDY

by

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Assignment presented in fulfilment of the requirements for the degree of Master of Philosophy (HIV/AIDS Management) in the Faculty of Economic and Management Sciences at Stellenbosch University

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March 2013

<u>DECLARATION</u>

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ABSTRACT

Access to antiretroviral therapy has been gradually increasing in resource limited settings, Zimbabwe included. Despite the increasing access to antiretroviral therapy quite a number of patients are still delaying to seek antiretroviral therapy. The purpose of the study was to examine factors associated with delay in seeking antiretroviral therapy.

A survey was conducted at Parirenyatwa Hospital Opportunistic Infections/Antiretroviral Therapy Clinic from September and November 2012. A total of 80 participants starting antiretroviral therapy who met the criteria were included in the study. The inclusion criteria included patients 18 years above but less than 65 years, no prior history of antiretroviral therapy and eligibility for antiretroviral therapy based on CD4 count or World Health Organisation clinical staging. An interviewer administered questionnaire containing demographic, socio-economic and health-facility factors were used to collect data. Four weeks was used as a cut off point for delay in seeking antiretroviral therapy.

The majority of participants (60%) delayed seeking antiretroviral therapy and the factors which were associated with delay in seeking antiretroviral therapy included female gender; lack of a partner; low level of education; low socio-economic status; treatment of opportunistic infections; extra laboratory tests on top of the CD4 count tests; not being on Cotrimoxazole Prophylaxis; not being referred for antiretroviral therapy by the testing site; stigma and discrimination. However disclosure was not associated with early seeking of antiretroviral therapy. Health system factors such as attitude of health care workers, shortage of staff and long waiting times were also identified as bottlenecks to patients seeking antiretroviral therapy early.

Efforts to increase early starting of antiretroviral therapy should focus on addressing the referral system from testing sites to antiretroviral therapy initiating sites, improving efficiency of antiretroviral initiating sites, increasing point of care HIV & AIDS diagnostics tools and addressing patient's concerns such as stigma & discrimination.

OPSOMMING

Toegang tot antiretrovirale terapie Geleidelik is steeds in hulpbron beperkte omgewing, Zimbabwe ingesluit. Ten spyte van die toenemende toegang tot antiretrovirale terapie 'n hele aantal van die pasiënte is nog steeds vertraag antiretrovirale terapie te soek. Die doel van die studie was om faktore te ondersoek wat verband hou met vertraging in die soek van antiretrovirale terapie.

'n Opname is by Parirenyatwa-hospitaal opportunistiese infeksies / antiretrovirale terapie Clinic van September en November 2012. 'N totaal van 80 deelnemers begin antiretrovirale terapie wat met die kriteria wat in die studie ingesluit is. Die insluiting kriterium was pasiënte ouer as 18 jaar maar minder as 65 jaar, geen geskiedenis voor antiretrovirale terapie en in aanmerking kom vir antiretrovirale terapie gebaseer op CD4-telling of Kliniese stadiëring Wêreld Gesondheid Organisasie. Was 'n onderhoudvoerder vraelys met demografiese, sosio-ekonomiese faktore en gesondheid-fasiliteit wat gebruik word om data in te samel. 4 weke is gebruik as die afsny punt vir die vertraging in die soeke na antiretrovirale terapie.

Die meerderheid van die deelnemers (60%) antiretrovirale terapie en die faktore wat verband hou met die vertraging in die soek na antiretrovirale terapie is vertraag te soek vroulike geslag, gebrek van 'n vennoot, lae vlak van onderwys, 'n lae sosio-ekonomiese status, behandeling van opportunistiese infeksies; Ekstra laboratoriumtoetse op die top van die CD4-telling toetse nie op Cotrimoxazole Profilakse, nie vir antiretrovirale terapie verwys deur die toets site, stigma en diskriminasie. Egter openbaarmaking wat nie verband hou met die vroeë soek van antiretrovirale terapie. Gesondheid stelsel faktore soos houding van gesondheidsorgwerkers, tekort aan personeel en lang wagtye, is ook geïdentifiseer as knelpunte aan pasiënte op soek na vroeë antiretrovirale terapie

Pogings om te vroeg begin van antiretrovirale terapie Verhoog Indien Fokus op die verwysingstelsel van die toets sites tot antiretrovirale terapie Inisiëring sites, verbetering van doeltreffendheid van antiretrovirale Inisiëring sites, Verhoog Punt

van Care MIV & VIGS diagnose tools en aanspreek van die pasiënt se Kommer Soos stigma en diskriminasie.

<u>ACKNOWLEDGEMENTS</u>

I am very grateful for the dedication, patience and professional guidance of my supervisor Greg Munro during my research project. His wisdom and encouragement provided me with the much needed motivation to undertake such a demanding and exhausting endeavour.

My sincere gratitude and appreciation to the Clinical Director, Supervising Consultant and Sister in Charge of Parirenyatwa OI/ART clinic for who kindly gave me the permission to conduct the research at the clinic. Many thanks go to the Sister in Charge, Sister Zvorwadza who assisted in introducing the research to potential participants and distribution of research documents. I also like to thank other staff members at the clinic who helped during the research.

To Stellenbosch University, Africa Centre for HIV & AIDS Management, I will forever remain grateful for the support during the research project.

To God Almighty, I thank you for the guidance throughout the process

Finally, I am deeply indebted to the participants themselves who set aside their other, often more important duties and responsibilities to take part in this research.

ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
IRIS	Immune Reconstitution Inflammatory Syndrome
JREC	Joint Ethics Research Committee at Parirenyatwa Hospital and College of Health Sciences
MOHCW	Ministry of Health & Child Welfare
NAC	National AIDS Council
OI	Opportunistic Infection(s)
OIC	Opportunistic Infections Clinic
PITC	Provider Initiated Testing & Counseling
REC	Research Ethics Committee
SU	Stellenbosch University
UNAIDS	United Nations Joint Programme on AIDS
VCT	Voluntary Counseling & Testing
WHO	World Health Organisation

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CHAPTER 1

1.1 BACKGROUND

According to the World Health Organization Progress Report (WHO Progress Report, 2011), at the end of 2010 about 34 million people were infected with the HIV virus globally with more than 68 % of them living in Sub-Saharan Africa. Globally the number of new infections continues to decline though there are regional variations. Southern Africa is the region mostly affected by HIV worldwide with prevalence peaking between 10 and 40%. Zimbabwe is one of the four countries in the region (after Swaziland, Botswana and Lesotho) most severely hit by the epidemic (Sub – Saharan HIV and AIDS Statistics, 2009). However, Zimbabwe is the only country in the region which had a substantial decrease in HIV prevalence at national level. The decline from 29.6% in 2002 to current rate of 14.2% has been due to a number of factors which include mortality and reduction of new infections. The country has an estimated population of 12.1 million (Central Statistical Office, 2008) and by the end of 2009 it was estimated that 1.1 million people were living with the virus (Ministry of Health and Child Welfare, National HIV & AIDS Estimates 2009, (MOHCW, 2009)). The age group most affected (15-49) constitutes the most productive sector of society. The prevalence among this age group has dropped from 15.07 % in 2008 to 14.26% in 2009 but this still remains unacceptably high (MOHCW, 2009). According to the National AIDS Council 2011, 3rd Quarter Report (NAC, 2011) the total number of clients (both adults and children) in need of ART in Zimbabwe stood at 593 000 in accordance with the WHO 2010 Guidelines that utilize a CD4 count of 350cells/mm^3. About 382 000 adults and 37 000 children were on antiretroviral therapy by the end of the third quarter in 2011 (NAC, 2011).

As part of the 3 by 5 initiative, in 2003, the Ministry of Health and Child Welfare set up five pilot clinics with the help of various partners. These clinics were meant to provide holistic care for the management of HIV/AIDS and to pave the way for the introduction of antiretroviral drugs in the public sector. The sites chosen for the five pilot clinics were Harare and Mpilo Central Hospitals, Triangle Hospital (a private hospital run by Triangle Sugar Estates), Khami Road clinic (a city council-run establishment in Bulawayo) and Howard Mission Hospital. These sites were chosen mainly because of the infrastructure that was already in place and some sites

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already had Cotrimoxazole prophylaxis programs on site. Nationwide training of health care workers on the management of opportunistic infections and antiretroviral therapy was initiated in order to facilitate rolling out of the antiretroviral therapy (ART) program in Zimbabwe. National HIV & AIDS Treatment Guidelines were introduced together with the national first line and second line antiretroviral regimens. These guidelines have been regularly updated to be in line with current WHO guidelines. Operating protocols for the clinics were introduced in order to ensure standardization in the management of opportunistic infections and ART.   Antiretroviral therapy roll out in the public sector started in 2004 at the mentioned 5 pilot sites.

Parirenyatwa Hospital is the largest referral hospital in Zimbabwe and it has several departments which include surgical, medical, pediatrics, outpatients and the Opportunistic Infections/Antiretroviral Therapy (OI/ART) clinic where HIV & AIDS patients are attended. Parirenyatwa OI/ART clinic started to offer antiretroviral therapy the same year pilot sites were established in Zimbabwe. The first patient was initiated on antiretroviral drugs on the 6th of July 2004. To date more than 13 000 patients have been registered at the clinic. The OI/ART Clinic caters for people mainly from the city of Harare suburbs and surrounding areas which include Mazoe, Chishawasha and Arcturus. The clinic does not offer HIV Counseling and Testing services. Patients are referred from other testing sites which include New Start Centre and City of Harare council clinics.

Assessment for antiretroviral therapy at Parirenyatwa OI/ART clinic is usually done over 3 visits which are usually spread over 2 weeks. The visits include Basic Counseling 1, Basic Counseling 2, Blood Collection for CD4 counting, ART Counseling 1, ART Counseling 2 and ART initiation. Basic Counseling focuses on the basic issues about HIV & AIDS which include transmission, progression, benefits of ART, prevention, disclosure and positive living. Basic 1 is done in a group session while Basic 2 is done one on one in a single session with the counselor to recap issues discussed during Basic 1.

After Basic Counseling patients are then booked to come for blood collection for CD4 count testing. The CD4 result often takes a week for the results to be available. Patients with CD4 counts less than 350cells/mm^3 are booked for ART counseling.

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ARV 1 is done in a group session while ART 2 is done one on one and a single session with the counselor to recap issues discussed during ART 1. ART Counseling covers issues to do with taking of antiretroviral therapy. These include frequency of taking drugs, storage of drugs, adherence and side effects. After ART counseling patients are then booked for ART initiation by a clinician.

During the ART initiation visit patients are assessed for opportunistic infections and staged according to the WHO Staging system. Those with opportunistic infections are treated accordingly and ART is started when they are stable. ART is started to patients with CD4 count less than 350 cells/mm^3 or those in WHO Stage III and IV. The first line regimen is comprised of tenofovir or zidovudine or stavudine plus lamivudine with either nevirapine or efavirenz. Those who are not eligible for ART are asked to return to clinic every 3–6 months for monitoring.

1.2 RESEARCH PROBLEM

Delay in initiation of antiretroviral therapy is a problem in many health facilities in Zimbabwe and beyond. Patients take time to present to health facilities to seek treatment soon after being tested for HIV infection. This delay often leads to increase in HIV & AIDS associated mortality and morbidity. A new prevention-treatment paradigm recently introduced by WHO and UNAIDS, is the Treatment 2.0 strategy (Hirnschall & Schwartländer, 2011). One of the key elements of this strategy is advancing point of care diagnostics and other simplified diagnostics and monitoring tools to reduce waiting times for diagnosis and initiation of ART. It recommends CD4 count testing just after HIV testing and referral to an antiretroviral initiating site for registration, assessment and consideration for antiretroviral drugs initiation

Despite patients being referred to access treatment early at the clinic, the majority of patients often delay to come to seek treatment. Most of the patients come with advanced HIV disease which often responds poorly to antiretroviral therapy. The researcher conducted this research to determine the factors associated with delay in seeking antiretroviral therapy among patients starting treatment at Parirenyatwa OI/ART clinic.

1.3 RESEARCH QUESTION

What are the factors associated with delay in seeking treatment among patients starting antiretroviral therapy at Parirenyatwa Hospital OI/ART Clinic?

1.4 PROJECT JUSTIFICATION

The research identified the factors associated with delay in seeking antiretroviral therapy among patients attending Parirenyatwa OI/ART clinic. In the developing countries of which Zimbabwe is part of, patients often delay to seek antiretroviral therapy due to various reasons which leads to high morbidity and mortality. The findings of the research will be very useful in providing meaningful conclusions that can be implemented to reduce morbidity and mortality as well as improving the efficiency in the process of initiating antiretroviral therapy at the clinic. The results will be shared with relevant stakeholders including the Ministry of Health and Child Welfare (MOHCW); HIV counseling and testing sites and other relevant partners so that the morbidity and mortality associated with delay in initiation of antiretroviral therapy is reduced in Zimbabwe.

1.5 AIM AND OBJECTIVES

1.5.1 Aim

The aim of the study was to determine the factors associated with delay in seeking treatment among patients starting antiretroviral therapy at Parirenyatwa Hospital OI/ART Clinic in order to come up with measures that will increase seeking of antiretroviral therapy among eligible patients.

1.5.2 Objectives

The following were the objectives of the research:
1) To establish the patient's knowledge on the benefits of antiretroviral therapy.
2) To identify the current referral system for patients receiving antiretroviral therapy at the clinic.
3) To determine the socio-cultural and economic factors that causes patient's to delay in seeking antiretroviral therapy.
4) To determine factors related to the clinic associated with delay in seeking antiretroviral therapy from the patient's perspective.

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5) To make suggestions that will enable early starting of antiretroviral therapy among patients.

CHAPTER 2 – LITERATURE REVIEW

Sub-Saharan Africa remains the most affected region in the global AIDS epidemic; with an estimated 22.9 million people living with HIV (WHO Progress Report, 2011)]. The number has been gradually increasing since people are now accessing antiretroviral therapy and now living longer. However the prevalence of HIV infection has been declining in about 22 countries Sub –Saharan Africa (WHO Progress Report, 2011). The stage of HIV disease in infected individuals before starting HAART plays a crucial role in the success of treatment. Individuals with advanced HIV disease at the time of HAART initiation tends to respond poorly to treatment and have a higher mortality rate compared to those who initiate earlier (Egger et al, 2002). Late presentation also poses a higher cumulative risk of HIV transmission to others, considering that earlier presentation and HIV-suppressing treatment might otherwise reduce viral load and risk of transmission. A significant proportion (15%-43%) of HIV infected individuals in the developed world; present at clinics for care with advanced or severe disease HIV disease i.e. either in WHO stage 3 or 4 or CD4 lymphocyte count ≤ 200 cells/lug (Chadborn et al, 2005). Late presentation prevents people living with HIV/AIDS from obtaining the maximal benefit of being started on HAART early, treated for opportunistic infections and benefiting from health education and prophylactic interventions that are more effective when implemented earlier.

The introduction of HAART has significantly reduced the mortality and morbidity of people living with HIV/AIDS globally and in low and middle income countries the number of people on antiretroviral has increased by 17 fold since 2003 (WHO Progress Report, 2011). However access to these lifesaving drugs is still a challenge in many developed countries mainly in Sub-Saharan Africa region (Kigoz et al, 2009). HIV infection without antiretroviral therapy in the vast majority of infected individuals gradually progresses to destroy the immune system leading to high morbidity and mortality.

In many HIV/ AIDS care programmes in Africa, patients are assessed clinically and prepared for treatment for HAART over a period which varies between 4 to 12 weeks (ART-LINC of IeDEA, 2008). They typically attend the clinic on three or more

occasions when information and counselling is provided on adherence and other aspects of ART. Due to various reasons which lead to delay in seeking antiretroviral therapy pre-treatment mortality of around 30 deaths per 100 person-years has been reported from a study done in South Africa (Lawn et al, 2005). There are several factors associated with delay to seek care and treatment which include patients' sociocultural, economic and health system related factors.

Disclosure is an important public health goal for a number of different reasons. It motivates sexual partners to seek testing, changes behaviour and ultimately decreases transmission of HIV, increased opportunities for social support and improves access to necessary medical care including antiretroviral treatment (Abaynew et al, 2011). Not disclosing to a partner may result in delayed presentation. This could be explained that the desire to hide one's HIV-positive status from a spouse may inhibit HIV care-seeking. According to a World Health Organization article, "Gender Dimensions of HIV Status Disclosure to Sexual Partners" (WHO, 2004) partners or spouses who do not disclose their status their partners are more likely to present late.

HIV Stigma is associated with delayed presentation to care. UNAIDS defines HIV-related stigma and discrimination as: "…a 'process of devaluation' of people either living with or associated with HIV and AIDS…Discrimination follows stigma and is the unfair and unjust treatment of an individual based on his or her real or perceived HIV status." (UNAIDS, 2003).The stigma might come from the community or from healthcare workers. The HIV infected individual will not be comfortable to attend the clinic due to fear of stigma from either fellow community members or healthcare workers at the clinic. Studies done in Mozambique (Posse et al, 2009) and Zambia (Fox et al, 2010) have supported the idea that HIV & AIDS stigma is associated with delay in care.

Patients with low economic status often take time to be started antiretroviral therapy. Though antiretroviral therapy is for free in developed countries there is usually a cost to patient. The costs include transportation fees, laboratory tests and drugs for treatment of opportunistic infections. In terms of economic status, women are

affected more than men and those in rural communities are affected more than those in urban areas.

Poor service delivery at the health care facility has also been associated with delay in initiation of antiretroviral therapy. Health facility factors associated with poor service delivery include lack of health personnel, infrastructure, equipment and material used to provide care (Posse, Meheus et al, 2008). On top of that organisational factors also play a significant role. Organizational factors refer to the manner in which resources are coordinated and controlled in the process of providing treatment (Posse et al, 2008). Resources might be available but poor management might result in poor service delivery. In most HIV & AIDS clinics before patients are put on antiretroviral therapy they undergo a series of preparatory counseling sessions. These are often spaced which often delay starting of antiretroviral therapy. Blood investigations which include CD4 count often takes long time before the results are out. The turnover time can be weeks to months.

CHAPTER 3 - METHODOLOGY

3.1 STUDY DESIGN AND POPULATION

The research design was a cross – sectional quantitative survey. The reference and source populations for the study were HIV infected people in Zimbabwe and HIV infected people eligible for antiretroviral therapy in Harare, Zimbabwe respectively. The target population was adults 18 years and above but less than or equal 65 years who were starting antiretroviral therapy at Parirenyatwa Hospital OI/ART Clinic.

3.2 SAMPLING

The survey was carried over a period of two months, mid-September and mid – November 2012. All patients who started antiretroviral therapy during this period who met the eligibility criteria were given consent forms to participate in the study. A total of 220 patients were started on antiretroviral therapy during the period and 80 of them met the criteria and consented to participate in the study. The response rate was 95%. The 80 participants included both those who started antiretroviral therapy early (n = 31) and those who delayed treatment (n = 49). Patients who started antiretroviral therapy early were also included for comparison purposes. Delay in starting antiretroviral was defined as starting antiretroviral therapy more than 28 days after being tested for HIV infection and requiring treatment. Patients out of the age range (less than 18 years and above 65 years), with history antiretroviral therapy exposure who were being reinitiated on therapy and those who had regular CD4 count monitoring prior to starting treatment were excluded from the study.

3.3 DATA COLLECTION

Data was collected using a questionnaire. The questionnaire contained demographic data, sociocultural, economic and health facility factors associated with delay seeking antiretroviral therapy among other things. The questionnaire was administered by the researcher who was the medical doctor who initiated the participants on antiretroviral therapy. A pre - test of the questionnaire was carried out on the first 10 research participants and the data collection tool was adjusted accordingly.

3.4 DATA HANDLING AND ANALYSIS

After collection the data was entered into a Microsoft Access Database which was designed specifically to capture data of the study. Frequencies, proportions and others measures were calculated form the database using queries. The proportion of patients that delayed to seek antiretroviral therapy together with the associated factors was also identified using queries. Qualitative data was handled thematically.

3.5 PERMISSION AND ETHICAL CONSIDERATIONS

The permission to carry out the study was sought from Parirenyatwa OI/ART Clinic Sister in Charge, Supervising Consultant of Parirenyatwa Hospital OIC/ART and the Clinical Director of Parirenyatwa Group of Hospitals. The study was ethically approved by the Joint Research Ethics Committee of Parirenyatwa Group of Hospitals and University of Zimbabwe College of Health Sciences and the Research Ethics Committee of Stellenbosch University. A signed consent form was obtained from every participant prior to entry into the study. The consent form was both in English and Shona. No names were written on the data collection tools. Confidentiality was assured and maintained.

CHAPTER 4 – DATA PRESENTATION AND ANALYSIS

4.1 RESULTS

1. Patients who delayed to be initiated on HAART

The aim of the study was to identify the factors associated with delay in the initiation of antiretroviral therapy. Delay was defined as starting HAART more than 28 days (4 weeks) after being tested for HIV. Figure 1, shows the three Scatter Plots with ranges of days 0 – 2500, 0 – 500 and 0 – 100 to clearly show the spread the number of days between date tested for HIV and date started on antiretroviral therapy.

Figure 1: Days between Date of HIV Test and Date Started on Antiretroviral Therapy
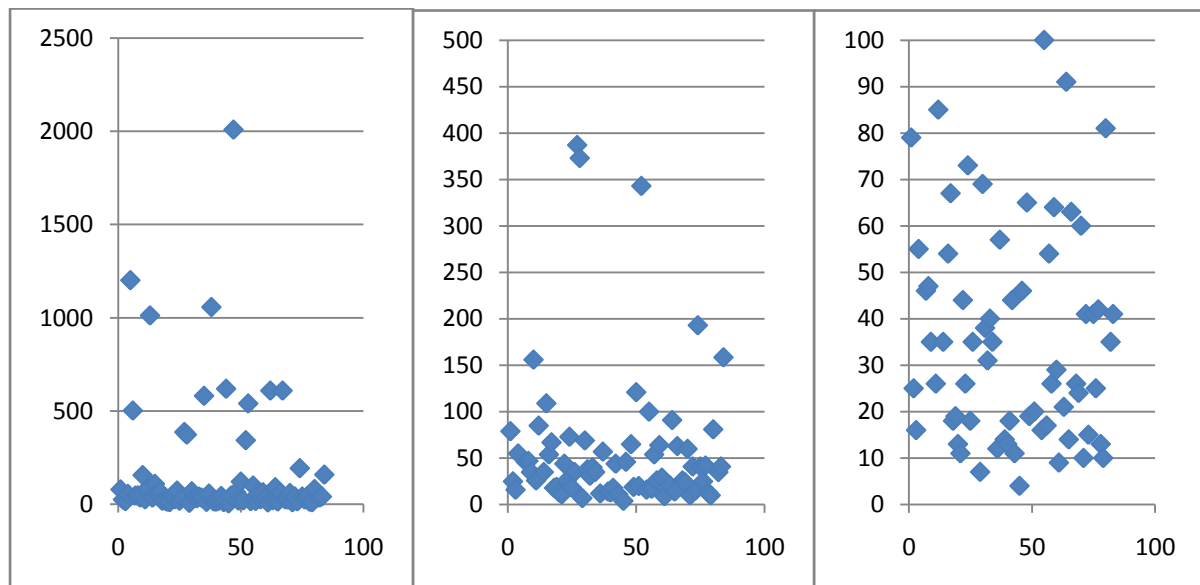
The minimum number of days was four and the maximum number was 2008. The average numbers of the days between HIV test and antiretroviral therapy for the 80 participants was 159 days, the mode 35 and median 41. Out the 80 participants who were initiated on antiretroviral therapy during the time of study only 31 were initiated on therapy within four weeks after HIV test. A total of 49 patients delayed using four weeks as the cut off of point. This means 60% of the participants delayed in starting antiretroviral therapy.

Figure 2, is a cumulative frequency of the 80 patients on the number of patients that were started on antiretroviral after a specific period.

Figure 2: Cumulative Frequency of Patients Started on HAART after a Specific Period
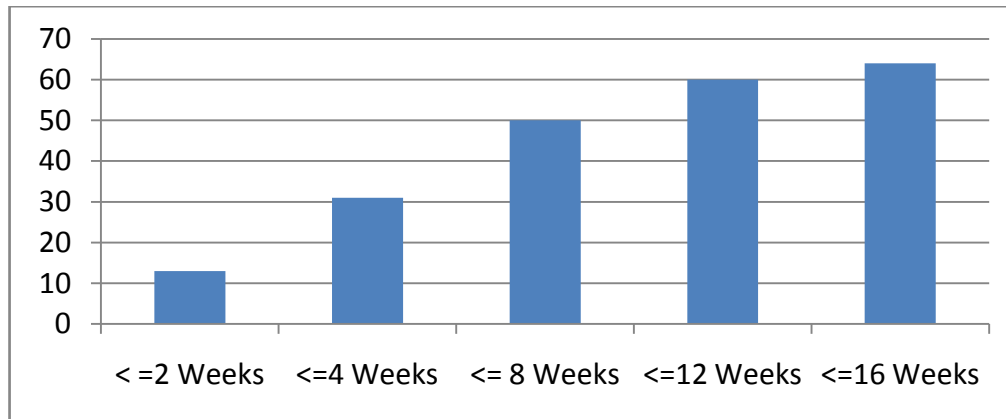
Out the 80 patients only 13 were started on antiretroviral therapy within 2 weeks of being tested for HIV infection, 31 within 4 weeks, 50 within 8 weeks, 60 within 12 weeks and 64 within 16 weeks. This leaves about 16 patients who were started on therapy more than 16 weeks after being tested for HIV infection. The researcher analyzed variables of the questionnaire linking them to delay starting antiretroviral therapy.

2. Demographic Data

During the two months period 80 participants were recruited. Out of the 80, 39 were males and 41 were females. The average age was 36 years. The minimum age was 18 and the maximum age was 65. The median age group was 37 and the mode was 36. Out the 49 patients who delayed to be started on HAART 28 were females and 21 were males. The graph below shows sex and the proportion that delayed starting HAART. 53% of the male participant delayed to start as compared to 68% of female participants.

Figure 3: Participants that Delayed HAART with Sex
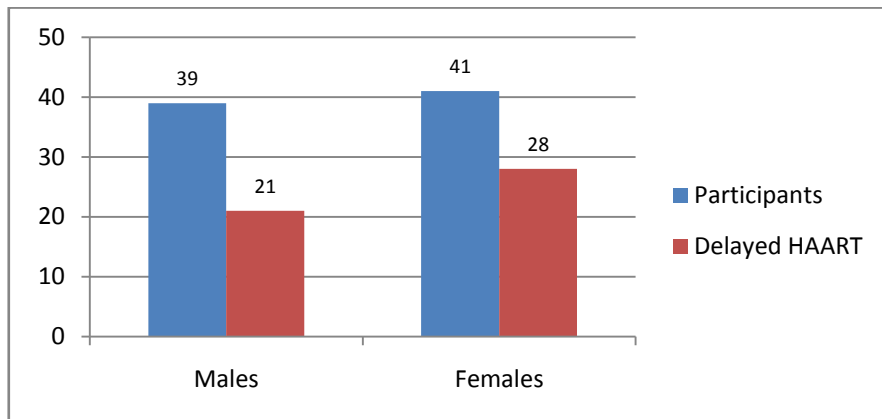
Figure 4 shows the marital status of the participants. The graph shows that the majority of the participants were married and the separated were least. As a percentage, 83% of never married, 55% of married, 54% of divorced, 75% of separated and 80% of widowed delayed starting antiretroviral therapy.

Figure 4: Marital Status and Delayed HAART
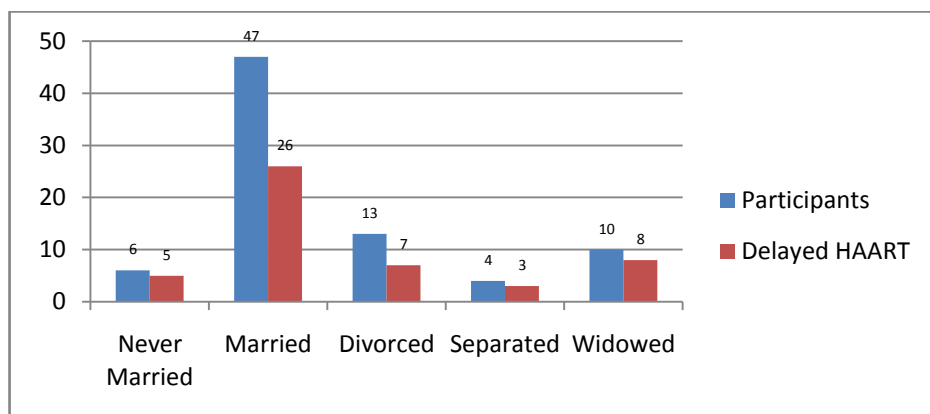
The employment status of the participants: 29 were not employed, 27 were employed on full time basis, nine were employed on part time basis, 12 were self-employed and three were students. The majority of the participants were not employed. In terms of starting HAART early only seven of the not employed, 12 of the full time employment, five of the part time employment, seven of self- employed and none of the students did. Only 32% of the not employed started HAART early as

compared to 44%in those employed full time. Figure 5 below summarizes the employment and starting of antiretroviral therapy.

Figure 5: Employment Status versus Starting HAART Early or Delayed
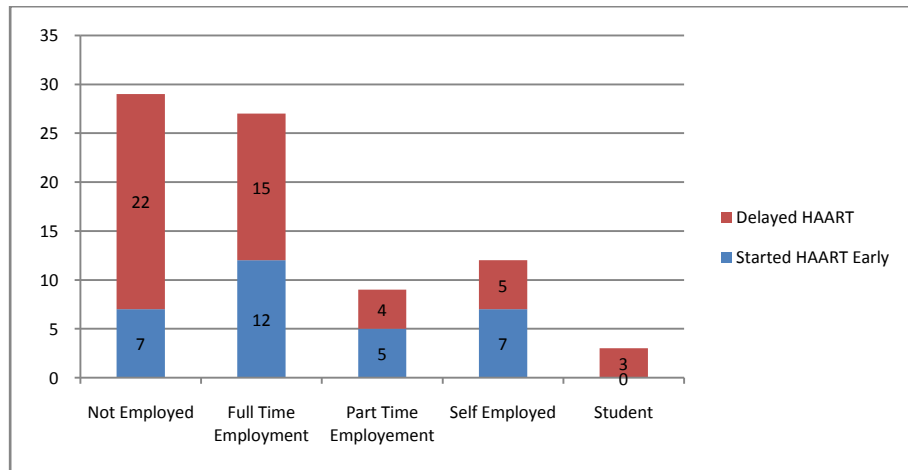
Three of the participants had never been to school and 11 attended up to primary education alone. A total of 66 participants had a level of education above secondary. All the three participants who have never been to school delayed starting HAART, seven for primary, 31 for secondary and eight for tertiary/college. Figure 6, shows those participants level of education and the proportion that delayed starting antiretroviral therapy.

Figure 6: Level of Education and Delayed HAART
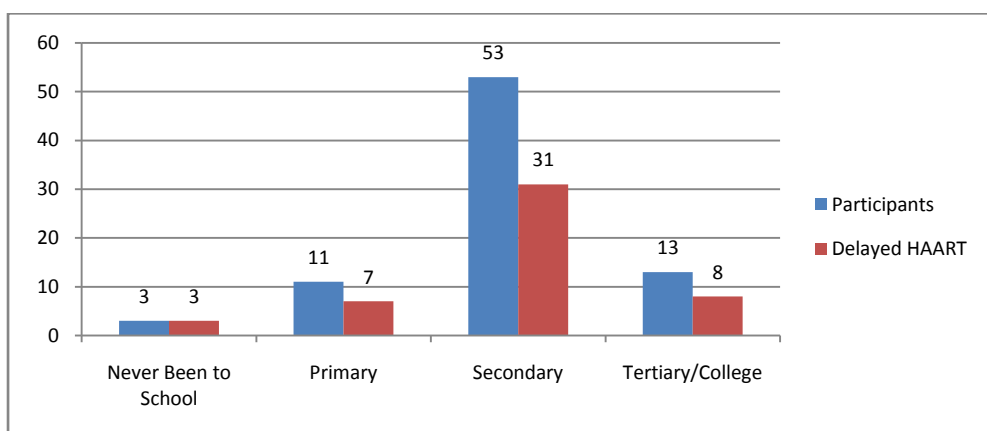
3. HIV Testing

The study grouped HIV testing models into Voluntary Counseling Testing (VCT) and Provider Initiated Testing and Counseling (PITC). A total of 47 (59%) of the participants were tested via VCT and the remaining 33 (41%) via PITC. Out of the 49 patients who delayed starting HAART 28 were tested via VCT and the remaining via PITC. Figure 7, below shows the places participants got their HIV test.

Figure 7: Place of HIV Test
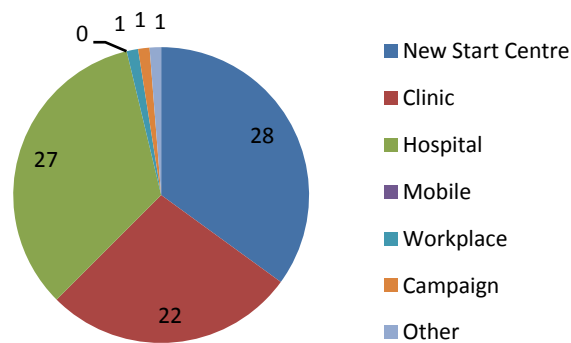
The majority of the patients were tested at New Start Centre followed by hospitals and clinics. None of the participants were tested during mobile testing and only one each for workplace, campaign and other.

A total of 41 of the participants had their CD4 count tests done at the testing site. Out the 49 who delayed to start antiretroviral therapy 22 had there CD4 done counts done at the testing site and 27 had their CD4 counts tests done somewhere. After an HIV test 61 (76%) of the participants were referred for antiretroviral therapy. Out of the 49 participants who delayed HAART, 33 were referred for HAART and 16 were not and Table 1 below illustrates this.

Table 1: Referral for HAART and Delayed HAART

HAART Referral	Participants	Delayed HAART	Delayed HAART (%)
Referred for HAART	61	33	54
Not Referred for HAART	19	16	84

After HIV testing 44 of the participants were given referral letters to take to the antiretroviral initiating site, and 36 were not given. Out of the 49 who delayed HAART 27 were not given letters and 22 were given. This means 50% of those given referral letters delayed HAART which is lower as compared to 75% among those not given referral letters.

Figure 8: Referral Letter and HAART Initiation
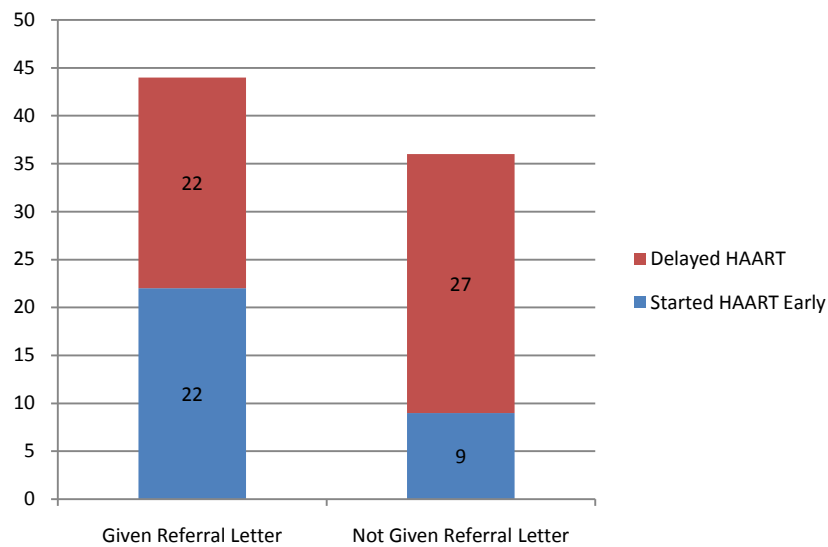
4. Counseling Sessions

The researcher analyzed the duration of counseling. Patients attend a total of four counseling sessions. For the 80 participants the average duration of counseling sessions was six days, the mode was three and the median was also three. The minimum was one day and maximum was 70 days. Figure 9 below shows a Scatter plot for the 80 participants on the duration of counseling sessions.

Figure 9: Scatter Plot on Duration of Counseling Sessions for the 80 participants
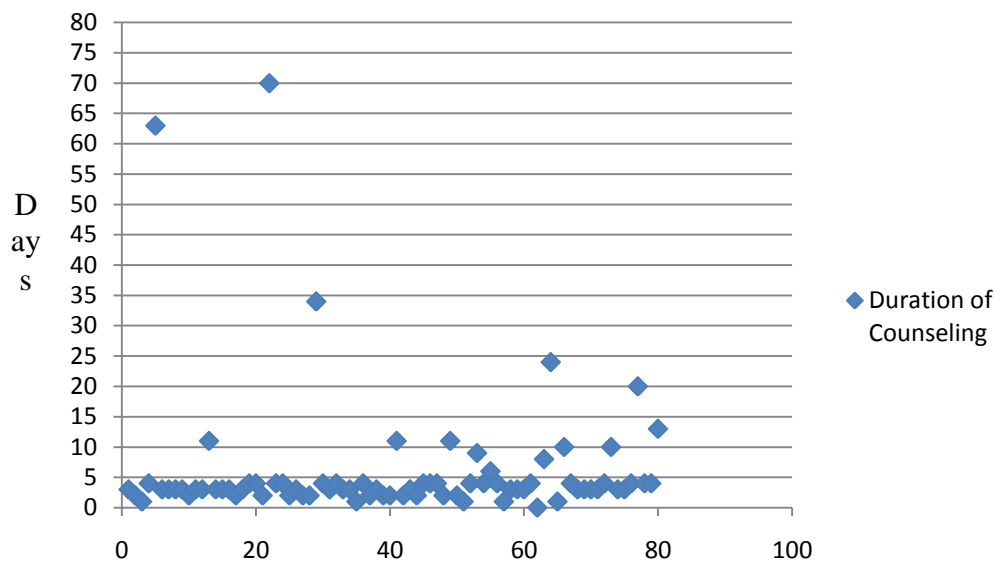
A total of 13 participants had counseling sessions duration above average that is 6 days. Out of the 13 who had counseling session duration above 6 days, eight of them delayed starting antiretroviral therapy.

5. Laboratory Investigations

A total of 33 participants had CD4 count done at the testing site, 19 at HAART initiation site, six in private and 22 had their CD4 counts done at other places. Figure 10 below shows where the CD4 samples were taken.

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Figure 10: Place of CD4 Testing
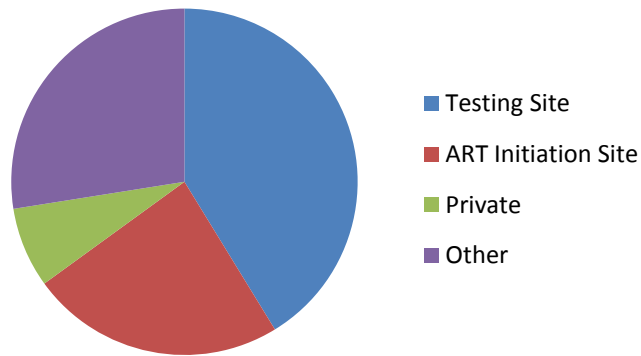
The average duration between date CD4 sample taken and result out was 3 days, the mode was 0 days and the median was also 0 days. 11 participants paid for the CD4 test and 69 had their CD4 count done for free at various institutions. Out of the 11 participants who paid for their CD4 counts seven of them delayed starting HAART. Apart from CD4 count patients are often asked to have other extra tests. Out the 80 participants nine were asked to have extra tests on top of the CD4 count and of those nine, eight of them delayed to start antiretroviral therapy.

Figure 11: Extra Test(s) and Initiation of HAART
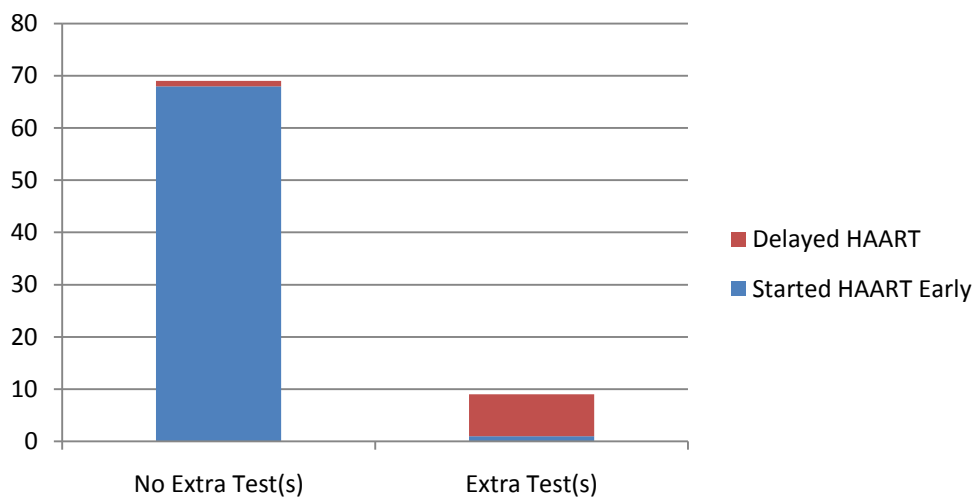
6. Antiretroviral Therapy Initiation

At Parirenyatwa OI/ART Clinic before patients are started on antiretroviral therapy they are booked a date to come and see a medical officer for initiation of treatment. Of the 80 participants 53 of them were started antiretroviral therapy on the booked date and 27 were not. Out of the 27 who were not started treatment on the booked date 21 (78%) of them delayed starting therapy. Figure 12 below shows some of the reasons why the 27 participants were not started HAART on the booked date.

Figure 12: Reasons for Not Being Started on HAART on the Booked Date
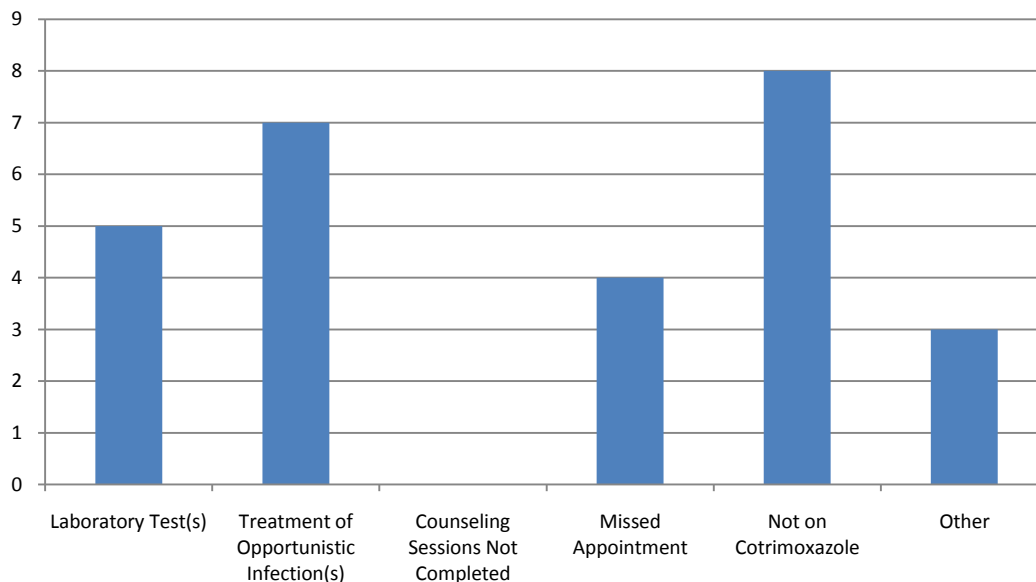
7. Partner Notification and Testing

A total of 55 of participants had regular sexual partners and 25 had no regular sexual partners. 49 of the 55 with regular partners were staying together and majority has been staying together for more than 12 months. Figure 13 below shows the proportions of those with regular sexual partners and those without who started HAART early or delayed. The proportion of those without sexual partners who delayed HAART is larger (72%) as compared to those with regular sexual partners (56%).

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Figure 13: Sexual Partner and HAART Initiation
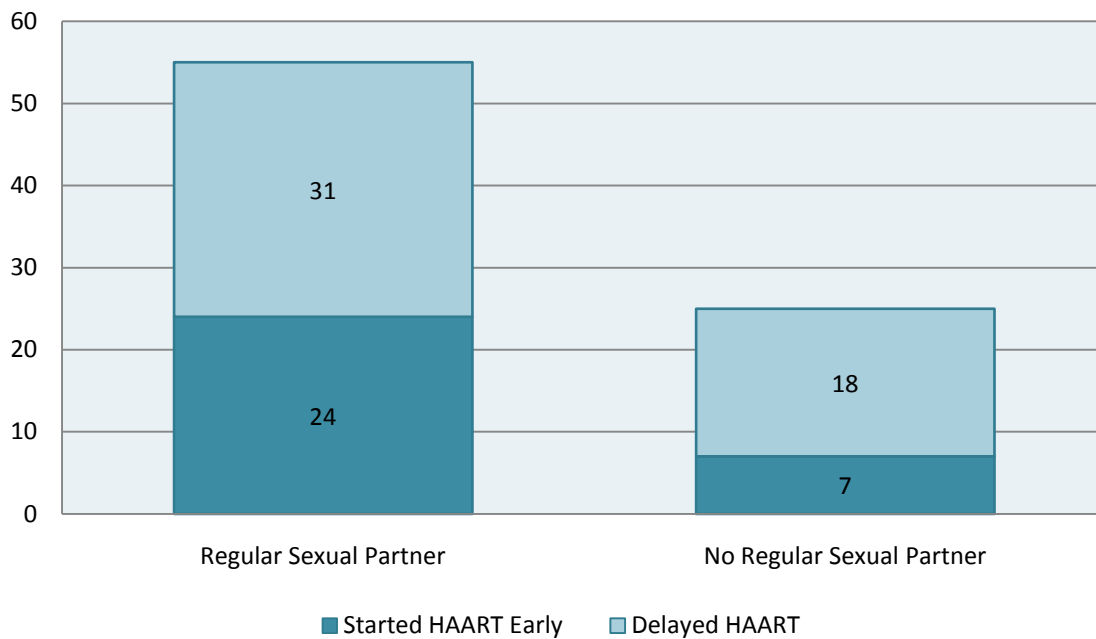
A total of 52 of the participants disclosed their status to their partners and 40 partners of participants had disclosed their status. The reasons which participants mentioned for not disclosing included fear of rejection, marital conflict and absence of the other partner. Those who had their partners disclosed 10 of them were negative and 30 were positive. Of the 30 partners who were positive 13 of them were on antiretroviral therapy. Table 2 below shows partner antiretroviral therapy status and HAART initiation.

Table 2: Partner Antiretroviral Therapy Status and Initiation of HAART

	Participants	Started HAART Early	Delayed HAART
Partner on HAART	13	7	6
Partner Not on HAART	17	10	7

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8. Stigma and Discrimination

A total of 16 participants experienced stigma and discrimination. The forms of stigma and discrimination the participants' experienced included rejection, loss of employment, affected relationships, fear to meet familiar faces at the clinic plus testing site, being looked down upon, viewing HIV as a death sentence and fear among other things.

Of the 16 patients who experienced stigma and discrimination 13 of them delayed starting antiretroviral therapy. Figure 14 below illustrates this. The percentage of those who experienced stigma and discrimination that delayed HAART (81%) is much higher as compared to those who did not experience stigma and discrimination (56%)

Figure 14: Stigma & Discrimination and HAART Initiation.
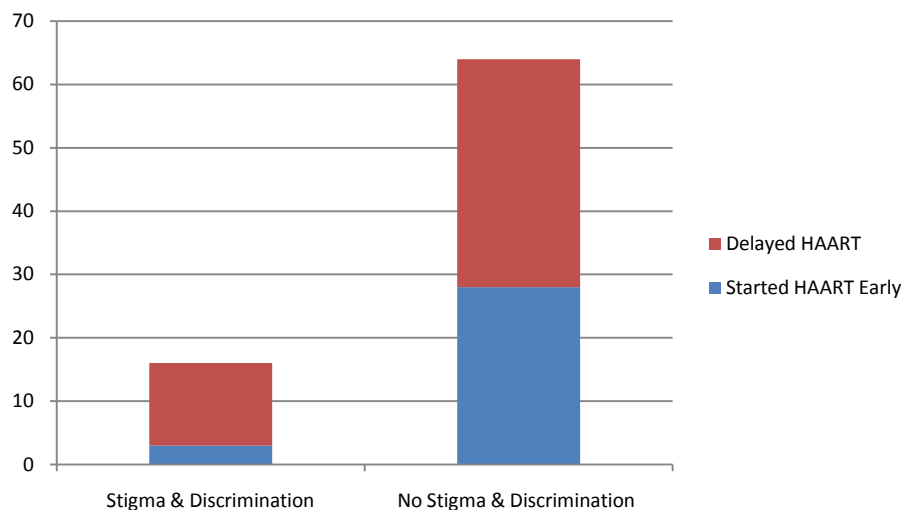
9. Distance and Transport to the Clinic

The majority of the participants stay in the high density suburbs, followed by low density, medium density and finally those outside Harare. Figure 15 shows the residential area and the proportion that delayed HAART. As a percentage the proportion that delayed HAART per each group high density (58%), medium density (68%), low density (63%) and outside Harare (56%). Medium density and low had the highest proportion of patients who delayed to be initiated on HAART.

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Figure 15: Residential Area and Delayed HAART Initiation.
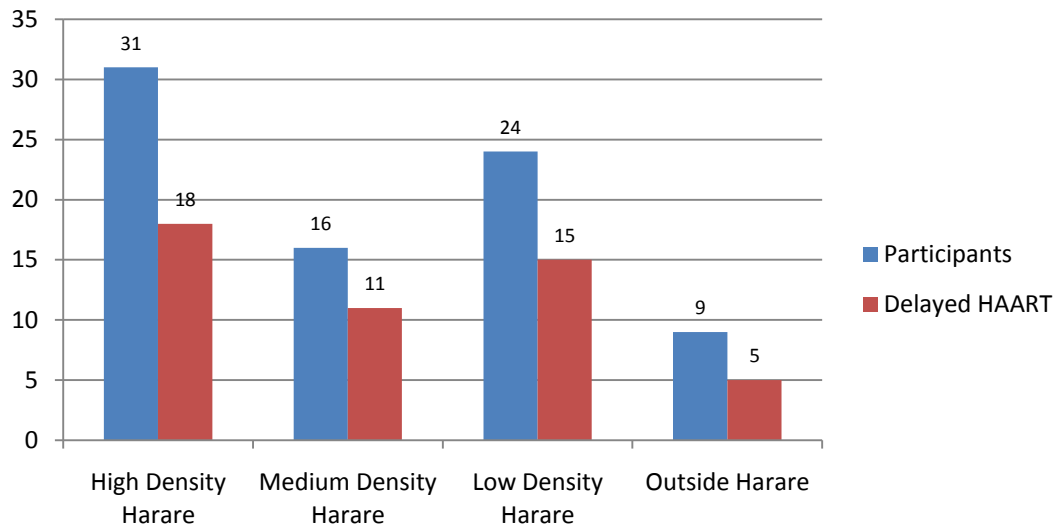
The commonest mode of transport used by participants when coming to clinic is by public transport followed by private transport, walking and bicycle. Only one of the participants came to the clinic by bicycle and delayed to seeking antiretroviral therapy. Figure 16 below shows the proportion that delayed HAART in each group.

Figure 16: Mode of Transport and HAART Initiation.

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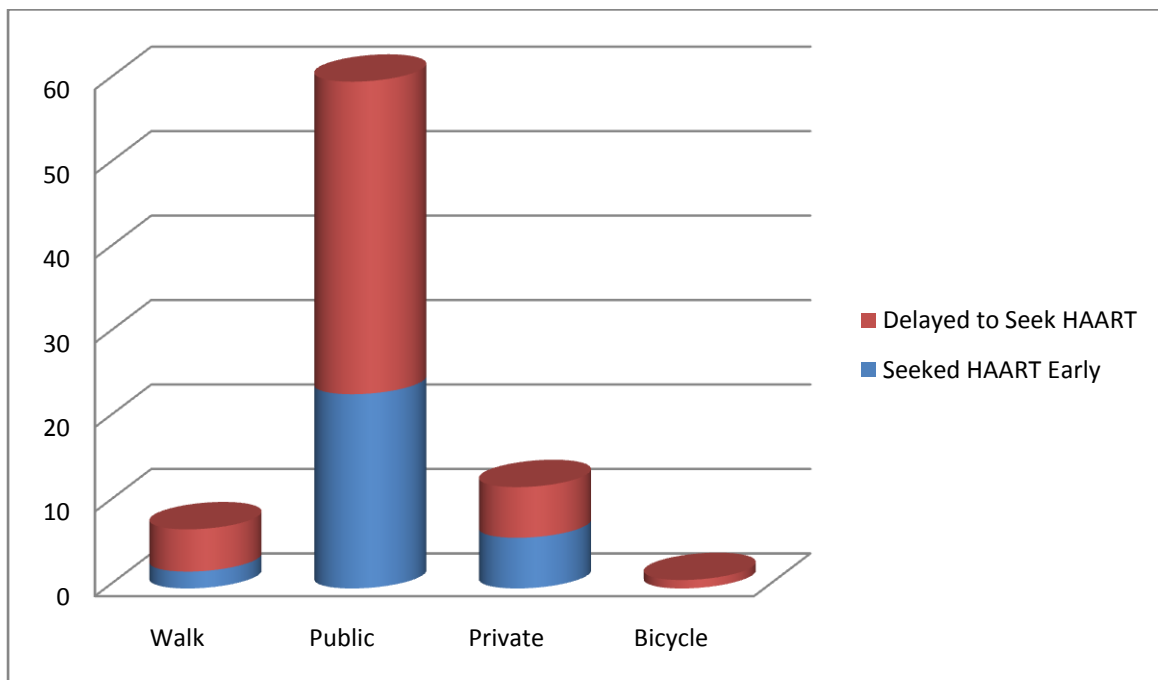
When asked whether the participant has failed to the clinic due to lack of transport or transport money 11 participants answered yes. Of those who failed to come because transport or money transport money eight of them delayed to seek antiretroviral therapy.

10. Quality of Service at Parirenyatwa OI/ART Clinic

The participants were asked to rank the quality of service they received they received at the clinic. Figure 17 below shows the results.

Figure 17: Quality of Service at Parirenyatwa OI/ART Clinic According to Participants
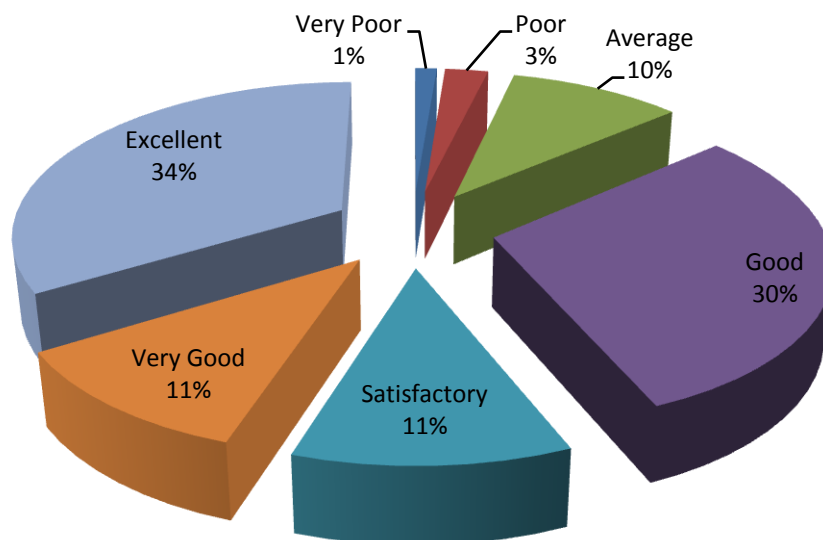
The majority of the participants (34%) ranked the service as excellent while only 1% ranked the services as very poor. A total of 11 participants ranked the services as average and below while the rest was above average. Out of the 11 who ranked the services average and below, six of them delayed to be started on antiretroviral therapy.

When asked on the areas which needs improvement at the clinic the majority of the participants were worried with the time they time spent at the clinic. They said they spent a lot time sitting in queues before being attended in the reception, consultation rooms or at the pharmacy. They also raised the issue of confusion in at the clinic.

They said patients are not given directions properly to where they are supposed to go which leads to some of them being lost and confusion within the clinic corridors. Other issues raised included the poor communication skills of health workers; need to attend to serious patients first; creating a separate room for patient starting antiretroviral therapy; awareness of the clinic in the media and to increase the number of doctors among other things.

4.2 DISCUSSION

The study revealed that 61.3% of patients delayed seeking antiretroviral therapy using 4 weeks as the cut of point. This finding is consistent with the findings from the ART in Lower Income Countries collaboration of the International Databases to Evaluate AIDS (ART-LINC of IeDEA, 2008) in which they carried out a survey to evaluate antiretroviral therapy in resource limited setting. In the evaluation they found out that in Africa patients are assessed clinically and prepared for treatment for HAART over a period which varies between 4 to 12 weeks. In this study using the cumulative frequency 75% (n= 60) of the patients were started on antiretroviral therapy within 12 weeks leaving the other 25% not yet on antiretroviral therapy. This is however a worrying figure considering the current improvements in antiretroviral therapy programmes in developing world.

Among the participants there were more females than males. The findings is however consistent with other studies. While traditional gender roles give men the power to deny women access to health care (Go et al. 2003), the physical and emotional strength associated with masculinity and power can also make it unacceptable for men to seek health care (Greig & Lang 2000). Women tends to have a better health seeking behaviour than men and also, women are often more likely than men to be tested for HIV because of them attending antenatal and child health clinics. Among those who delayed to seek antiretroviral therapy there were more women than men again and this can be attributed to the women's inferior economic position (Go et al. 2003). Marital status was also a factor in deciding whether some seek treatment early. The study found that those with partners tend to seek treatment earlier than the divorced, widowed, never married or separated. The same applied to those with regular sexual partners than those without. This

might be due to the social support to those with partners. Partners tend to encourage each other to go for HIV testing and start treatment.

Those who are not employed and without a source of income i.e. students, delayed to seek antiretroviral therapy. Though antiretroviral therapy is offered for free at Parirenyatwa OI/ART clinic there is often some cost associated with the process - the major cost being transport and treatment of opportunistic infections. Others studies have also found that lack of money to cover costs often delays treatment (Coetzee et al. 2004; Ehiri et al. 2005). Other low socio economic status which include low level of education, walking to the clinic, staying in areas of low status and staying outside Harare where associated with high proportions of participants who delayed to seek antiretroviral therapy. The study also showed that paying for the CD4 count and extra laboratory tests delays starting of treatment. This is due to the cost associated which most of the patients cannot afford due to poor socioeconomic status.

The majority of the participants i.e. 59% were tested for HIV via voluntary counseling and testing (VCT). This can be explained by the fact that in Zimbabwe VCT was introduced very early and it is the model most people are used to through the New Start Centres which are the testing sites. Provided Initiated Testing and Counseling (PITC) was however introduced a few years back and more campaigns are needed to promote it. The popularity of the VCT is however confirmed by the finding that the majority of the participants were tested at New Start Centres. It however disturbing that among the participants none were tested via mobile testing and only one each was tested via campaigns and workplace initiatives. The findings show that the HIV testing strategy in Zimbabwe is still very weak. The focus is mainly at health institutions and the donor funded New Start Centres. There is minimal mobile and workplace HIV testing.

The study also found out that after testing patients who were not referred to centres that starts HAART and those not given referral letters delayed to seek treatment as compared to those who were referred and given referral letters. The finding supports the importance of quality post-test counseling accompanied by referring patients to centres that offers treatment.

The study found that 52 (65%) participants had disclosed their HIV status to their partners. Out of the 52 who disclosed 56 % (n =29) which is the majority, delayed to seek antiretroviral therapy and 44 % (n=23) started antiretroviral therapy early. These findings are however contrary to other studies. According to the other studies (Carter, 2008 & Bartlett, 2009) HIV positive individuals who do not disclose their HIV status to their spouses/partners are more likely to present late to HIV & AIDS care compared with those who disclosed their HIV status the explanation being that the desire to hide one's HIV-positive status from a spouse may inhibit HIV care-seeking (Abaynew et al, 2011).

The results of the study also showed that health system level barriers can also delay eligible patients from starting antiretroviral therapy. The average time a patient spent between registration and starting antiretroviral therapy for the 80 participants was 21 days which is very high. From the qualitative data from the patients most of them complained of the long waiting times, shortage of health care workers and unfriendly attitude of some of the health care workers. These findings are consistent with finding from other studies (Coetzee et al. 2004; Ehiri et al. 2005 & Pose et al, 2008).

The study showed that 38% (n =27) were not started on antiretroviral therapy on the date they were booked. Of those who were not started on therapy on booked date 78% (n =21) delayed to started on therapy. The proportion is however very high. The majority of the patients were not started antiretroviral therapy on the booked date were not on Cotrimoxazole prophylaxis. According to clinical practice a patient cannot be started on antiretroviral therapy at the same time with Cotrimoxazole due to similarity of side effects. The finding shows that the routine of initiating patients on Cotrimoxazole prophylaxis is still poor at the clinic. Treatment of opportunistic infections was next to Cotrimoxazole prophylaxis as a reason why patients were not started treatment on booked date. Treatment of opportunistic infections usually delays treatment due to the screening process, cost associated and fear of immune reconstitution inflammatory syndrome (IRIS) by the clinicians.

The results of the study showed that HIV positive individuals who experienced HIV stigma and discrimination were significantly associated with seeking antiretroviral therapy late. Similarly studies done in India (Chakrapani et al, 2009) Mozambique

(Pose et al, 2009) and Zambia (Fox et al, 2010), reported the same results. This could be explained that AIDS stigma affects preventive behaviours such as HIV test-seeking behaviour and care-seeking behaviour upon diagnosis even as access to care has become more common (Abaynew et al, 2011).

CHAPTER 5

5.1 CONCLUSION

The majority of participants delayed seeking antiretroviral therapy and the factors which were associated with delay in seeking antiretroviral therapy included female gender; lack of a partner; low level of education; low socio-economic status; treatment of opportunistic infections; extra laboratory tests on top of the CD4 count tests; not being on Cotrimoxazole Prophylaxis; not being referred for antiretroviral therapy by the testing site; stigma and discrimination. However disclosure was not associated with early seeking of antiretroviral therapy. Health system factors such as attitude of health care workers, shortage of staff and long waiting times were also identified as bottlenecks to patients seeking antiretroviral therapy early.

Efforts to increase early starting of antiretroviral therapy should focus on addressing the referral system from testing sites to antiretroviral therapy initiating sites, improving efficiency of antiretroviral initiating sites, increasing point of care HIV & AIDS diagnostics tools and addressing patient's concerns such as stigma & discrimination.

The study however had some limitations that could have influenced the findings. The study relied on participants' self-report of historical events which could lead to recall biases. The sample size was not large enough due to the time limit. The analyses of seeking treatment late would not represent the characteristics of HIV positives who never attended the clinic (selection bias). Social desirability should also have affected responses given by participants due to the nature the questions (social desirability bias). Moreover, the fact that the researcher who happens to be a clinician at the clinic was involved in data collection might have introduced an interviewer bias though measures were taken to avoid this. Finally the instrument used in this study is not generic which was not validated for use in Zimbabwe.

5.2 RECOMMENDATIONS

After attending testing sites, patients should be referred to centres which initiate antiretroviral therapy. The benefits of antiretroviral therapy should be discussed

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during post- test counseling so that patients quickly consider starting treatment. The referral should be accompanied by a detailed referral letter. In the long term all testing centres should be in a position to offer CD4 count testing for quick assessment of immune status and later be in a position to start antiretroviral therapy so that all services are offered under one roof.

For the Ministry of Health, the strategy for HIV testing should be widened. Among the participants very few were tested via mobile services, at the workplace or during a campaign. The Ministry should promote, finance and support HIV & AIDS at the workplace, testing campaigns and mobile HIV testing.

For the Parirenyatwa OI/ART clinic, the average time (21 days) a patient spends between registration and initiation of antiretroviral therapy is high. Measures should be put in place so that the time becomes shorter. Activities such as counseling sessions and collection of bloods should be booked on the same days rather than on separate days to minimise the visits to the clinic.

The clinic should also have proper signage and patients should be directed adequately to avoid confusion at the clinic. The issue of poor communication skills and attitude of some of the health care workers should be addressed maybe through training in public relations.

The routine of initiating patients on Cotrimoxazole Prophylaxis should also be stressed at the clinic since quite a number of patients had their initiation of antiretroviral therapy deferred because of the fact that they were not on Cotrimoxazole due to the clinician's fear of the similarity of side effects with those of antiretroviral drugs.

And finally to future researchers, more research into how implementation of point of care diagnostics in Zimbabwean setting can improve access to antiretroviral therapy is very necessary.

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APPENDICES

Appendix 1 - Questionnaire

Demographic Data

1. Patient OI Clinic Number ---------------------------   Registration Date (DD/MM/YYYY) ----/----/--------

2. Gender ◯ Male ◯ Female   Date of Birth (DD/MM/YYYY) ----/----/-------- Age [   ]

3. Marital Status ◯ Never Married ◯ Married ◯ Divorced ◯ Separated ◯ Widowed

4. Employment Status ◯ Not Employed ◯ Full time Employment ◯ Part time Employment ◯ Self Employed ◯ Student

5. Level of Education ◯ Never been to school ◯ Primary ◯ Secondary ◯ Tertiary/College

HIV Test Details

6. Date of HIV Test (DD/MM/YYYY) ----/----/------

7. HIV Testing and Counseling Model ◯ VCT ◯ PITC

8. Reason for HIV Test

◯ Diagnosis ◯ Tuberculosis ◯ PMTCT ◯ STI ◯ Death of Spouse/Child ◯ Occupational

◯ Sexual Abuse ◯ Family Member on ART ◯ Other

9. Place of HIV Test ◯ New Start Centre ◯ Clinic ◯ Hospital ◯ Mobile ◯ Workplace ◯ Campaign ◯ Other (Please Specify) ------------

10. Was CD4 Count done by testing site?   ◯ Yes   ◯ No

11. Where you referred to an antiretroviral initiating site by the testing site ◯ Yes ◯ No

12. If Yes where you given a referral letter ◯ Yes ◯ No

Counseling Sessions

13. Date Booked for Basic Counselling Sessions (DD/MM/YYYY) ----/----/--------

14. Date of Completion of Basic Counseling (DD/MM/YYYY) ----/----/--------

15. Date Booked for Antiretroviral Therapy Counseling (DD/MM/YYYY) ----/----/--------

16. Date of Completion of Antiretroviral Therapy Counseling (DD/MM/YYYY) ----/----/--------

Laboratory Investigations

17. Place CD4 was taken Testing Site ART Initiation Site Private Other (Please Specify) ----

18. Date CD4 sample Taken (DD/MM/YYYY) ----/----/--------

19. Date CD4 Result was Out (DD/MM/YYYY) ----/----/--------

20. Did you pay for the CD4 Count? Yes No

21. Apart from the CD4 count were you requested to have other extra test(s)

◯ Yes ◯ No

22. Did you manage to have the test (s) done and bring back the result in time back to the hospital?
◯ Yes ◯ No

23. If failed you to have the test (s) done and bring the result(s) back in time to the hospital state the reason(s)

Reason(s)--

----

24. Was your initiation on antiretroviral drugs deferred because of laboratory test(s)?
◯ Yes ◯ No

Antiretroviral Therapy Initiation

25. Where you started on antiretroviral drugs on the day you were booked? Yes No

26. Date booked for antiretroviral therapy initiation (DD/MM/YYYY) ----/----/--------

27. Date started on antiretroviral therapy (DD/MM/YYYY) ----/----/--------

28. If you were not started on antiretroviral drugs on the booked date state the reason(s)

◯ Laboratory Test(s)

◯ Treatment of Opportunistic Infection(s)

◯ Counseling Sessions not completed

◯ Missed Appointment

◯ Other (Specify) --

Quality of Services at Parirenyatwa OI/ART Clinic

29. How do you rank the quality of service you service you received at Parirenyatwa OI/ART Clinic during your antiretroviral therapy initiation process?

○ Very Poor ○ Poor ○ Average ○ Good ○ Satisfactory ○ Very Good ○ Excellent

30. Which areas need improvement so that patients are started on antiretroviral therapy in time?

Partner Notification and Testing

31. Do you have a regular sexual partner? ○ Yes ○ No   Do you stay together? ○ Yes ○ No

32. If staying together, for how long?

○ Less than 3 months

○ Greater than or equal to 3 months but less than 6 months

○ Greater than or equal to 6 months but less than 12 months

○ Greater than or equal to 12 months

35. Have you disclosed your status to your partner? ○ Yes ○ No

36. If you have not disclosed what are the reasons for not disclosing?

----

37. Has your partner disclosed his/her status to you? ○ Yes ○ No

38. If he/she has disclosed to you what is his/her HIV Status ○ Negative ○ Positive

39. If partner is Positive is he/she on antiretroviral therapy? ○ Yes ○ No

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Stigma & Discrimination

40. Has HIV & AIDS stigma and discrimination deterred you from seeking antiretroviral therapy?

◯   Yes   No.

If yes describe how?

………

………

Distance and Transport to Clinic

41. Where do you stay?

◯ High Density Harare ◯ Medium Density Harare ◯ Low Density Harare ◯ Outside Harare

42. What mode of transport do you use to come to the clinic?

◯   Walk ◯   Public ◯   Private ◯   Bicycle ◯   Other…………………………………………………….

43. Have you ever failed to come to the clinic due to lack of transport or transport money?

◯   Yes ◯   No

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Appendix 2 – Consent English

<div align="center">

STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

</div>

FACTORS ASSOCIATED WITH DELAY IN STARTING ANTIRETROVIRAL THERAPY FROM THE PATIENTS' PESPECTIVE: CROSS – SECTIONAL STUDY AT PARIRENYATWA OI/ART CLINIC

You are asked to participate in a research study conducted by Dr Richard Makurumidze (MBchB – UZ, Dip in HIV Man- CMSA) from the Africa Centre of HIV/AIDS Management at Stellenbosch University in partial fulfillment of the requirements for MPhil in HIV/AIDS Management. The study will look into the factors associated with delay in starting antiretroviral therapy at Parirenyatwa Hospital OI/ART Clinic. You were selected as a possible participant in this study because you are among the patients starting antiretroviral therapy at the clinic.

1. PURPOSE OF THE STUDY

The aim of the study is identify factors associated with delay in starting antiretroviral therapy among eligible patients starting antiretroviral therapy at Parirenyatwa OI/ART clinic and to make recommendations on how to improve the process of accessing antiretroviral therapy at the clinic and in Zimbabwe. Many people in Zimbabwe who are HIV infected often takes time to come to seek antiretroviral therapy due to various reasons and this has led to increase in HIV associated illnesses and death.

2. PROCEDURES

If you volunteer to participate in this study, you will be asked questions by the researcher. The process will last between 10 and 15 minutes. The questionnaire will be completed once at Parirenyatwa OI/ART clinic.

3. POTENTIAL RISKS AND DISCOMFORTS

You might feel uncomfortable in discussing your HIV & AIDS issues and experiences in which case the wish to continue or stop participation will be respected. Refusal to participate in the study will not influence the service or treatment you will receive at the clinic. In case of a problem the researcher will refer you to specific services as needed. The services might include counseling and other necessary forms of support.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The study will identify factors associated with delay in seeking antiretroviral therapy among patients starting antiretroviral therapy at Parirenyatwa OI/ART clinic in order to inform evidence based interventions and policies to prevent delay in accessing antiretroviral therapy. Though you will not benefit directly, your participation in the study will contribute to the understanding of factors so that measures can be put in place for future patients.

5. PAYMENT FOR PARTICIPATION

You will not receive any payment for participating in this study.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by use of a study number to identify participants. All the collected data will be kept securely and only the researcher will have access to it. The results of this study will be presented to Africa Centre for HIV/AIDS Management and may be presented or published in professional settings but the identities of all participants will remain anonymous.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. Refusal to participate or being withdrawn from this study will not influence the service or treatment you will receive at the clinic

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact

Dr Richard Makurumidze (Principal Investigator)

Parirenyatwa Hospital OI/ART Clinic,

Harare.

Zimbabwe

Cellphone: - +263772759296.

Email:-ricmanie2000@yahoo.com

Greg Munro (Supervisor)

University of Stellenbosch

Africa Centre for HIV & AIDS Management

Stellenbosch, South Africa

Email:- greg@sybaweb.co.za

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the University of Stellenbosch, Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to [*me/the subject/the participant]* by [*name of relevant person]* in [*English/Shona/other]* and [*I am/the subject is/the participant is]* in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject]* was given the opportunity to ask questions and these questions were answered to *[my/his/her]* satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

_____

Name of Subject/Participant

_____

Name of Legal Representative (if applicable)

_____   _____

Signature of Subject/Participant or Legal Representative   Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant]* and/or [his/her] representative _____ [*name of the representative]. [H*e/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [**English/*Shona/*Other*] and [*no translator was used/this conversation was translated into* _____ by _____].

_____   _____

Signature of Investigator   Date

Appendix 3 – Shona Consent

STELLENBOSCH UNIVERSITY
GWARO REKUNZWISISA NEKUBVUMA KUPINDA MUCHIDZIDZO

TSVAKURUDZO YEZVIKONZERO ZVINOITA KUTI VARWERE VANONOKE KUTANGA MAPIRITSI EKURAPA CHIRWERE CHESHURAMATONGO PACHIPATARA CHE PARIRENYATWA.

Zita Remudzidzi   **: Dr Richard Makurumidze**

Dhipatimendi   **: OI/ART Clinic**

Chikoro   **: Africa Centre of HIV/AIDS Management,**
Stellenbosch University

MAVAMBO

Murikukumbirwa kuti mupinde muchidzidzo chine zita rakanyorwa pamusoro. Ichi chidzidzo chiri kuitwa kuti mudzidzi awane magwaro edzidzo epamusoro. Chidzidzo ichi chinenge chichitsvakurudza zvikonzero zvinota kuti varwere vanonoke kutanga mapiritsi ekurapa chirwere cheshuramatongo paParirenyatwa OI/ART Clinic. Makaonekwa makakodzera semumwe anokwanisa kupinda muchirongwa ichi sezvo muri mumwe weavo varikuda kutanga mapiritsi.

1. DONZO RECHIDZIDZO

Donzo rechidzidzo nderekutsvakurudza zvikonzero zvinoita kuti varwere vanonoke kutanga mapiritsi uye nekushandisa ruzivo urwu kugadzirisa nzira dzingashandiswe pakuvandudza chirongwa ichi pakiriniki apa pamwe nemuZimbabwe. Vanhu vazhinji vane utachiwana hwe HIV muZimbabwe vanonoka kunotsvaka rubatsiro rwekupinda pachirongwa chekumwa mapiritsi nekuda kwezvikonzero zvakasiyana-siyana izvi zvinoita kuti zvirwere nendufu zvinyanye kuwanda zvichikonzerwa neutachiwana hweHIV.

2. ZVICHAITWA KWAURI

Uchinge wazvipira kupinda muchirongwa ichi, muchabvunzwa mibvunzo iri pabepa nemudzidzi. Izvi zvingatore maminitsi 10 kusvika ku 15. Mibvunzo iyi munoibvunzwa kamwe chete pakiriniki pano.

3. NJODZI DZAMUCHASANGANA NADZO

Munogona kusava makasununguka pakukurukura nezve utachiwana hwe HIV pamwe nezve AIDS asi sarudzo yekuenderera mberi nechirongwa ichi kana kurega inoremekedzwa zvikuru. Sarudzo yenyu yekusapinda muchidzidzo haizokanganise kurapwa kwamuichaitwa. Kana mukasangana nematambudziko, mudzidzi anovapo kukubatsirai nezvamunenge muchida.

4. ZVAMUCHAWANA MUCHIDZIDZO ICHI

Chidzidzo ichi chichatsvakurudza zvikonzero zvinota kuti varwere vanonoke kutanga mapiritsi ekurapa shuramatongo pakirinika yeParirenyatwa OI/ART kuitira kuti chirongwa ichi chivandudzwe.. Hapana mubhadharo wamuchawana kubva pachirongwa ichi, asi kuti kupinda muchidzidzo kwamuchaita kuchabatsira mukunzwisisa kuitira kuti veruzhinji vazobatsirikawo muneramangwana.

5. MUBHADHARO

Hamuzowani mubhadharo wekupinda muchirongwa ichi.

6. KUCHENGETEDZWA KWEUMBOO HWENYU

Zvese zvamuchataura nezvichabuda muchidzidzo chino zvichagara panzvimbo yakachengeteka uye zvinobuda chete kana imi muchinge matendera kana kuti zvatenderwa nemutemo. Mazita enyu achachengetedzwa kuburikidza nekushandisa nanhamba. Zvichabuda muchidzidzo chino zvichapihwa ve Africa Centre for HIV/AIDS Management uye zvinogona zvakare kutsikiswa mumagwaro ezveutano.

7. KUPINDA NEKUBUDA MUCHIRONGWA

Unogona kusarudza kupinda kana kubuda muchirongwa. Kana wabvuma kupinda muchirongwa ichi, unotenderwa kuzobuda machiri pasina kana matambudziko. Unotenderwa zvakare kusapindura mibvunzo yausingade ugorambazve uri muchidzidzo ichochi. Mudzidzi anogona kukuburitsa muchidzidzo ichochi kana achiona paine zvikonzero zvinokodzera kudaro.

8. MAZITA EVATSVAKURUDZI

Kana uine mibvunzo chero zvaungade kunzwisisa pamusoro pechidzidzo ichi, sununguka kubata vanotevera:-

Dr Richard Makurumidze (Mudzidzi)
Parirenyatwa Hospital OI/ART Clinic,
Harare.
Zimbabwe
Cellphone: - +263772759296
Email:-ricmanie2000@yahoo.com

Greg Munro (Murairidzi)
University of Stellenbosch
Africa Centre for HIV & AIDS Management
Stellenbosch, South Africa
Email:- greg@sybaweb.co.za

9.   KODZERO YEPARTICIPANT

Unotenderwa kubuda muchidzidzo ichi chero nguva pasina zvinoitika kwauri. Hautenderwi kushandisa mukana wechirongwa ichi sekodzero yekurapwa kana kuwana dzimwewo kudzero zvisina kutenderwa muchidzidzo chino. Kana uine mibvunzo ingaite nezvekodzero dzako pamusoro pechidzidzo ichi taura na Ms

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Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] veku University of Stellenbosch, Division for Research Development.

Zita reParticipant……………………………………………………………………

Saini ya Participant kana Saini yemumiririri weParticipant………………………………

Nguva ………………………………… Zuva…………………………………………………

Ukama hwemumiriri ne Participant………………………………………………………..

Saini youmufakazi…………………………………….Zuva…………………………………

Saini yemudzidzi………………………Zuva………………………………………………..

Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] veku University of Stellenbosch, Division for Research Development.

Appendix 4 – Stellenbosch REC Approval

UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
Jou kennisvennoot · your knowledge partner

Approved with Stipulations
New Application

06-Sep-2012
MAKURUMIDZE, Richard

Protocol #: HS863/2012

Title: Factors associated with delay in seeking antiretroviral therapy from the patients perspective: cross-sectional study at Parirenyatwa OI/ART clinic

Dear Dr Richard MAKURUMIDZE,

The New Application received on 23-Aug-2012, was reviewed by Research Ethics Committee: Human Research (Humanities) via Committee Review procedures on 29-Aug-2012.

Please note the following information about your approved research protocol:

Protocol Approval Period: 06-Sep-2012 -05-Sep-2013

Present Committee Members:
De Villiers, Mare MRH
Theron, Carl CC
Somhlaba, Ncebazakhe NZ
Viviers, Suzette S
Gorgens, Gina G
Fouche, Magdalena MG
Hansen, Leonard LD
Horn, Lynette LM
De Villiers-Botha, Tanya T
Newmark, Rona R
Prozesky, Heidi HE
Beukes, Winston WA

The Stipulations of your ethics approval are as follows:
REC Application Form
1. Please remove name of clinic from the title. Rather use a more generic description.
2. Section 4. Please provide some information on the occupational background of the researcher and current employment relationship (if any) with the research site. How will the researcher gain access to the identities and clinical details of potential participants in order to select out those suitable for the study , as this would normally be regarded as confidential healthcare information available only to those directly involved in patient care?
Research proposal
1. In the methodology please explain the participant recruitment and consent procedure in more detail. Also confirm that this is not a self-administered questionnaire but will be administered by the researcher, who will translate, as required.
Informed Consent
1.The informed consent contains all necessary information and is generally well written. The readability level could be further reduced in parts. The REC notes with appreciation that the informed consent form has been translated into Shona and the translation certificate attached.

Standard provisions
1. The researcher will remain within the procedures and protocols indicated in the proposal, particularly in terms of any undertakings made in terms of the confidentiality of the information gathered.
2. The research will again be submitted for ethical clearance if there is any substantial departure from the existing proposal.
3. The researcher will remain within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field of research.
4. The researcher will consider and implement the foregoing suggestions to lower the ethical risk associated with the research.

You may commence with your research with strict adherence to the abovementioned provisions and stipulations.

Please remember to use your **protocol number** (HS863/2012) on any documents or correspondence with the REC concerning your research protocol.

Appendix 5 – JREC Approval

UNIVERSITY OF ZIMBABWE

COLLEGE OF HEALTH SCIENCES

MEMORANDUM

FROM: Chairman, Joint Research Ethics Committee   **DATE**: 5 Sept 2012

TO: **Dr Richard Makurumidze,** Department of Medicine   **EXT:** 2241/2242

c.c: Chairman, Department of Medicine

RE: **FACTORS ASSOCIATED WITH DELAY IN SEEKING ANTIRETROVIRAL THERAPY FROM THE PATIENT'S PERSPECTIVE: CROSS-SECTIONAL STUDY AT PARIRENYATWA HOSPITAL OI/ART CLINIC – JREC/199/12**

Thank you for your application with the above mentioned title seeking approval from the Joint Parirenyatwa Hospital and College of Health Sciences Research Committee (JREC). The Committee has successfully evaluated and discussed the amendments you supplied.

It was agreed that your application be approved as a research project which is ethically sound.

Wishing you an enjoyable and fruitful research.

Approval Date: 5th September 2012

Expiry Date: 4th September 2013

Professor MM Chidzonga

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