

## Factors Associated with Delayed Entry into Medical Care among HIV Positive People who are aware of their Status in Bulawayo Zimbabwe

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**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. The study focused on measurable variables such as age, income levels, marital status, and knowledge of anti-retroviral treatment among HIV/AIDS positive people. The researcher sought to describe the socio-economic characteristics of those who delaying entering into medical treatment among HIV/AIDS positive people. 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 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.

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### 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 (World Health Organisation 2001). 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.

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. 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 et al 2001). A study by Ravies et al. (2008), 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), it was clear that cost and poverty are major barriers to accessing HIV treatment alongside other necessities such as food.

The researcher found that a number studies cite several demographic factors as contributing to the delay in presentation for care by HIV positive people. For example Ravies et al (2008) 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.

**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 Highly Active Antiretroviral Therapy (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.

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?
- What are the socio-economic characteristics of those who delay seeking treatment for HIV AIDS despite being aware of their sero-positive status?

**Purpose of the Study**

The purpose of the study was to establish reasons why patients who are aware that they are HIV sero-positive delay in seeking treatment.

**Objectives**

- Identify describe reasons 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 assist the nursing practice, health promotion, public and private sector stake holders in HIV/AIDS.

**Setting**

The research setting refers to “the surrounding environment in which the research takes place” [6]. The study was one public hospital in the city of Bulawayo which is Zimbabwe’s second largest city in six months i.e. between 09/09/2010 to 09/02/2011. 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. This department normally has an average of average of 150 patients daily.

**Ethical Considerations**

The research project was approved by the Higher Degrees Committee of the University of South Africa. 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. 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). The right to self-determination and informed consent were observed as the respondents participated voluntarily and could 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.

**METHODOLOGY**

A non-experimental, descriptive exploratory survey was used in the study. The study design allowed the researcher to remain objective as the study focused on measurable variables such as age, income levels, marital status, and knowledge of anti-retroviral treatment among HIV/AIDS positive people. The researcher sought to describe the socio-economic characteristics of those who delaying entering into medical treatment among HIV/AIDS positive people. The researcher adopted an explorative approach because he sought to explore the reasons for late entry into medical care among HIV sero-positive people in Bulawayo who are aware of their HIV status. Eligibility criteria have been defined by Brink et al. (2006), 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, had to be a patient in the hospital’s Opportunistic Infection Ward, had a CD 4 count >200 cells/ $\mu$ L.

**Data collection**

A questionnaire is a method of data collection through self-administration of written questions (De Vos 2001). A questionnaire was used as the data-collection instrument; it was divided into three sections to cover demographic information; the respondents’ knowledge about HIV testing and the need to seek treatment. In order to save time, the researcher recorded the range of possible responses for some of the questions so that the respondents could tick or circle the appropriate responses. This enabled the patients to go through the questionnaire in a reasonably short time. The researcher conducted a pre-test with ten patients at a major referral hospital in Zimbabwe. No changes were made after pre-test, as respondents understood the questions.

The researcher conducted a pre-test with ten patients. 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 were included in the main study making the total sample size to be 60.

## Participants

The size of a sample is “the total number of the respondents who actually participate in a study in relation to the accessible population” (Polit & Beck 2008). Simple random sampling was used to select respondents, 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.

## Validity and Reliability

According to Polit and Beck (2008), 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. Pre-testing of the instrument was conducted before the study. 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 was collected in a normal hospital setting to ensure minimal disturbance and discomfort to the respondents. The use of random sampling design in this study also did reduce internal validity.

## Data Analysis

The data were 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 and computed and presented both in tabular and graphical forms with comments attached.

## RESEARCH RESULTS

The respondents' ages ranged from 19 to 56 years. The 11-20 years age range only had two respondents. The majority of the respondents 68.4% (n = 41) 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 (UNAIDS 2010) 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.

Of the respondents, (68.3%: 41) were females and (31.7%: 19) were males. The females significantly outnumbered the males.. According UNAIDS (2010), 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.

Respondents were asked to state their highest level of education. 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.

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. In this study, 47% of the respondents were self employed while as much as 30% were unemployed and only 23% were in formal employment. 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.

Being married was associated with early presentation 40% (n=24) as compared with being single, separated or widowed particularly among women. Of the 7 respondents whose answers were

classified under other 2 (28.6%) were divorcees, 3 widows (42.9%) with no sexual partner in the last three years. 2 of the 7 respondents (28.6%) never married and did not have a sexual partner in the last 3 years. Respondents were asked to state how long it has been since testing HIV positive. 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.

#### **First Presentation at Health Facility after Testing HIV Positive**

Respondents were asked to state how long it took them to present themselves at a medical facility in search for HIV/ AIDS related treatment. 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.

#### **Coping Mechanisms**

65% (n=39) of the respondents had used some non medical form of treatment. 30% (n=18) of the patients 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.

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

When respondents were asked what triggered them to seek medical treatment 23.3% (n = 14) of them reported that they did seek treatment after getting sick, while 28.3 % (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

#### **DISCUSSIONS**

Nearly two-thirds of the sample reported that their families were either poor or very poor; therefore, experiences, attitudes and beliefs about the quality of care lower income people may receive or assumptions about the medical costs associated with HIV treatment could have prevented youth from entering into care more quickly. Of particular interest, was the relationship among social networks, background variables such as age, education, employment history, mental health, conduct problems, stage of HIV illness, and housing situations from the time of diagnosis to the youth's first health care visit. Additionally, based on common knowledge, we expected that having symptoms of HIV infection or AIDS would predict youth entering into care sooner than those not reporting either of these conditions.

Other research such as Knowlton et al (2005), Neaigus et al (2001) has also found that low income is positively correlated with HIV status. Being poor and uninsured is connected with lack of medical care for those with AIDS. Consistent with other findings in this study and in other studies was the relationship between ethnicity and HIV status. The ethnicity breakdown is similar to that found in previous research, especially that of Montgomery et al (2001) and Turner et al (2001). Data suggests that youth living with HIV are more likely to avoid seeking care if they have negative peer influences around them and do not have steady linkages to medical care. This research corroborated similar work showing that later entry into medical care was observed among males, those with lower incomes, people with no health insurance, those with little education, and persons referred from prison (Turner et al 2001). This study found that the older the male youth, the longer taken to seek care. A difference was that females delayed seeking care by 34 days as compared to males, (p<.05).

This 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, and 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. Socio-economic factors associated with late presentation were lesser education (42% of those with no secondary education presented late versus 33% of those with some secondary education or more), non-business occupation (43% of those unemployed, 42% of farmers and 40% of those with other occupations versus 33% of those with business employment presented late).

This was articulated by Kigozi, Dobkin et al (2009), state 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. Boler and Jellema (2005), 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.

A study conducted at a hospital in Uganda revealed that 68% of the sero positive patients were women compared to only 32% men (Kigozi et al 2005). 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.

Some studies suggest that nearly 40% of adults delayed access to primary care for more than a year after learning their HIV status and nearly 20% delayed accessing care for more than five years. Delayed time between HIV diagnosis and receiving care is a serious, but common, health risk (Montgomery et al, 2002; Scietinger et al 2003 & Samet et al 2001). These delays may not only create an opportunity for more serious illnesses to develop, but also create undue economic hardship on an already fragile national healthcare system. Those who delay health care for HIV diagnosis are commonly uninsured and very ill, creating a burden on facilities where they are treated. Many studies exploring factors associated with delays in seeking health services are focused on adults living with HIV.

## CONCLUSIONS

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.

## Recommendations

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 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.

There is need for conventional medicine to work in collaboration with traditional medicine and religion. Traditional and religious healers 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) make facts about anti-retroviral treatment and the advantages of early commencement of it an integral part of the HIV AIDS curriculum in schools.

## Limitations of the Study

The study was limited to one public hospital in 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 them.

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