

# The Factors Associated with Attrition and Their Extent in Affecting the Antiretroviral Therapy Clinic in Primary Healthcare Facilities in Anambra State Between May 2016 and May 2018

Article by Okebugwu Andrew Nwachimere-eze M.D, AIDS Healthcare Foundation Anambra state E-mail: ezeandyamaka@gmail.com

#### Abstract

The success of the third ninety in UNAIDS 90-90-90 by 2020 depends on the sustainability of antiretroviral therapy by clients on therapy. The therapy is inefficient if there is poor adherence. Due to certain factors, a fraction of the clients is lost from the clinic and they contribute to transmission of new infections. The aim is to inquire into these factors and their contribution to attrition in Anambra facilities.

A quantitative experimental study using a comprehensive purposeful sampling method. From the electronic medical record data of clients who have not been seen in the clinic for 90 completed days from May 2016 to May 2018 was accessed. These clients were disaggregated according to presence of descriptive addresses and phone contacts. Traceable clients were tracked on phone at seven different times over three weeks. Data was collected in an excel sheet and analysed using SPSS version 22.

For a total ever enrolled of 852 clients, there were 12 deaths. 265 clients (31% of total enrolment) that defaulted. 141 (53.5%) were untraceable while 124 (46.5%) were traceable. 29 clients (23.8% of traceable) were on self-transfer. 39 clients (31.7%) promised to return, while 56 clients (44.5%) were uninterested in the therapy.

The defaulter rate in these facilities is high and the fact that majority of these clients cannot be tracked due to poor contact information of clients is a source of concern. The negative effects of faith and economy were as well observed. Quality counselling and dialogues with faith leaders are recommended.

**Keywords:** attrition, factors, extent, anti-retroviral therapy, Anambra.

## Introduction

Attrition from HIV care which refers to the lack of continuity in accessing HIV care from a facility or program kicks seriously against the success of the three nineties as targeted by UNAIDS. It is a vicious cycle which keeps people out of sustained anti-retroviral therapy hence affecting the second 90. Because the third ninety depends on the second to record massive viral suppression, it is not left out. When the cause of attrition is such that the client discontinues treatment, then rebound viraemia could lead to transmission of new infections which therefore widens the target population within the first ninety. This means that retention in care is paramount to the success of epidemiologic elimination of HIV.

Disclosure especially for the female spouses has been very difficult for fear of gender-based violence and or loss of the home.

Forms of attrition include deaths, lost to follow up, transfer out, self-transfer without records, belief in faith healing, and poor attitude of health staff.

Presently, a lot has been done to ensure that people enrolled into care are retained in treatment to boost their clinical outcome. Some of these steps include quality adherence and pre- test counselling and post-test counselling. Some programs have provided transportation for clients to ensure retention while others have engaged in community ART where drugs are distributed in the communities. The drawbacks to the two last methods are sustainability and high rate of stigma and discrimination in the communities.

The objectives of this study are to study the causes of attrition in the ART clinics in Anambra State with the extent of their contribution with a plan to ensure that the amenable factors are worked on to ensure more retention of HIV clients.

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### Method

Anambra State is located at latitude 6.2758 N and longitude 7.0068 E. in the South Eastern zone of Nigeria, West African sub region. It has a population of 4, 177, 828. (2016 Census). It has 21 Local Government split into three senatorial zones. The prevalence of HIV is 2.4 (NAIIS, 2018). HIV/AIDS response in the state is overseen by the Ministry of Health through the State AIDS and Sexually Transmitted Disease Control Program and State agency for Control of AIDS and are conducted in tertiary, secondary and primary health facilities. The selected facilities are Primary Health clinics from Orumba, Ogbaru and Ihiala Local Government Areas. The target population were patients who are receiving care, treatment and support for HIV.

A multi staged random sampling was used to select six sites. Because this was an implementation research and the principle of justice and beneficence, a comprehensive non probability method was used. The study was quantitative and cross sectional.

The total ever enrolled was accessed. All clients who have been absent from clinic appointments for ninety completed days called (lost to follow up), dead clients and transfer out between May 2016 and May 2018 were received from the electronic medical record. The available data was sent to excel. The lost to follow up clients were then disaggregated according to presence or absence of phone numbers. Those that had phone numbers were further classified based on validity of telephone numbers. This gave rise to the groups "traceable and non-traceable".

Those in the traceable category were contacted at least seven times by phone and the results were documented on Microsoft excel and later exported to SPSS version 22 for analysis.

#### **Results**

The result of the study on the factors associated with attrition and their extent in affecting the antiretroviral therapy clinic in Primary Healthcare Facilities in Anambra State between May 2016 and May 2018 were as follows:

For a total ever enrolled of 852 clients, 370 were tested positive in the communities while 482 were tested positive in the facilities. There were 12 deaths and 265 clients (31% of total enrolment) that have not been seen for at least three completed months. More females 64% were lost, than males 36%. The most hit age group is the 16-25 group (35%), 24% for the 26-35 and 36-45 group, 12.1% for above 46 and 4.5% for 0-15 years. 180 clients (67.9% of lost) had the community outreaches as care entry point while 85 (32.1%) came in through health facility testing (OR= 4.424 95%CI 3.244- 6.036 p<0.0001). Single encounter lost to follow up was 108 (41% of the lost). Community tested single encounter lost to follow up was 74% (OR= 1.629 95% CI 0.9495 -2.7932, p<0.0764). 141 (53.5%) were untraceable because there was neither phone contacts nor descriptive addresses in the records while 124 (46.5%) were traceable. The traceable were re-tracked. None was dead. 29 clients (23.8% of traceable) were on self-transfer to other states. 39 clients (31.7%) promised to return citing reasons such as travelling and busy at work as excuses while 56 clients (44.5%) were uninterested because of faith healing (40) and lack of money for transportation (16).

#### **Discussion**

The success of any antiretroviral therapy program depends on good adherence to therapy. This includes taking the right drug, the right dosage, at the right time, at the right frequency, keeping appointments to laboratory and drug pick up.

The result showed 31% defaulter rate which is a huge gap from the 90% who are supposed to be on sustained ARVs (second ninety). This is higher than the value from previous studies at Botswana where the defaulter rate was 7.345% (Weiser S et al.,2003). But is a little lower than a Nigerian study which had 36% (Daniel et al 2004) as the defaulter rate. This high defaulter rate is mainly due to poor preparation before initiating therapy. The percentage of single encounter lost to follow up was the result that more females were lost than males stems from the fact that there were more females than males in the program. Also, male dominated culture has a role to play which is also highly affected by low rate of disclosure.

The most affected age group is the 15-26 years. This is a very unstable age group, highly dependent in nature. Adding the 27-45 age group to the 15-26 shows a consistency in the epidemiology of HIV; Predominance in the sexually active ages.

The proportion of community tested positives was high with an odd ratio of 4.4. The community testers usually are given targets to reach. Hence there is poor counselling and testing is done hurriedly. This is shown in the data as 74% the single encounter defaulters are from community tested clients. The clients are referred to the health facilities where they most times learn that what was conducted was an HIV test. They get enrolled but disappear thereafter.

The number of untraceable clients (53.5%) is also of great concern as further tracking is made impossible. The lack of descriptive addresses and valid phone contacts arise because the healthcare workers mostly request for such information after the client has tested positive and therefore what is received is a wrong information.

Self-transfer is a very important cause of attrition and it was clear from this study. It was lower than a study in Uganda where 61% to 80% of 111 patients lost between 2004 and 2007 and found alive were in care elsewhere (as defined by both seeing an HIV provider and continuing to obtain ART) Geng (2010). In Johannesburg, it was 41%Dalal (2008), while a second group found 66% of 260 traced patients who were alive to be in care elsewhere Rosen (2010). Usually, a transfer letter is issued to clients when they are relocating or have other concerns. However, some leave without such letters and therefore are classified as defaulters. Some of the contributing factors include relocation to other areas, incentives from implementing partners, free services (in the case that some services for instance the lab tests have user fees), and poor attitude of health staff.

Theological factors also showed up in this study. Some clerics claim to have healing powers including that of HIV. They conduct deliverances and part of the instructions after are that they should not get retested and that the drugs should be discontinued. Therefore, the patients decide to abandon the therapy as seen in this study.

The socio-economic status of the clients was also a factor in this study as some of the defaulters claimed that the cost of transportation was responsible for their default. This happens because of the high level of stigma and discrimination. In Nigeria and in Anambra, the HIV program has been cascaded to the primary healthcare centres such that within a few kilometres' interval, one can access care. The treatment is also largely free. But because of stigma and discrimination, people get enrolled in facilities that are very far from their homes without thinking about the sustainability of such decisions. This will later result to defaulting when clients are not able to foot the transportation bills.

The proportion that was ready to continue therapy was fair. They cited reasons such as being busy and not in the area as the cause of default. People living with HIV are human beings who are also important in the society. They also have their jobs and business to help them cater for themselves and their families. Some of the jobs involve working at same hours that the health workers also run the HIV clinics, hence they defaulting.

#### **Conclusion and recommendation**

The attrition rate of clients on anti-retroviral therapy in the facilities was high. The reasons were from poor counselling (adherence and pre-test and post-test), faith issues, self-transfer and inability to foot transportation bills.

I hereby recommend that:

- a) Clients should be properly counselled before testing and also collecting valid phone numbers and descriptive addresses from patients.
- b) Multi-month drug scripting (the dispensing of three months refill for the stable clients) could be a way for those that travel outside the area often.
- c) Quality adherence counselling will help in personal ownership of health by patient's nay disclosure issues. This will also address issues such as the tenure of ART. Those positives from the community interventions should be counselled properly before commencement of therapy. This should also address the issues of stigma and discrimination which will make the clients to access drug at closer places.
- d) The youth clinics should be segregated so that the age group would feel more comfortable during clinics.
- e) Faith based organisations should be engaged in dialogues to ensure they are acquainted with the right information about HIV
  - f) Introducing people to income generating activities will also help the indigent ones.

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If all these measures are deployed, I believe that the retention in care will improve greatly.

Further research recommendations:

This should include: Knowledge of clerics about HIV.

# Tables and figure

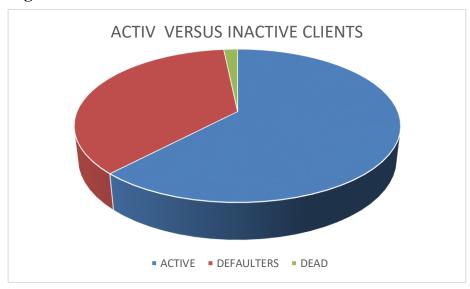


Figure 1. Showing proportion of inactive to active clients



**Figure 2.** Shows the traceability of the lost clients.



Figure 3. shows the tracking outcomes of those traceable

Table 1. showing attrition by gender

GENDER	NUMBER	%
MALE	96	36
FEMALE	169	64
TOTAL	265	100

**Table 2.** Showing attrition by age groups

AGE GROUP (years)	NUMBER	%
0-15	12	4.5
16-25	94	35.5
26-35	64	24.2
36-45	63	23.8
46-60	25	9.4
>60	7	2.6
TOTAL	265	100

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