

# **The Extent of Poor Adherence to HIV Treatment, Poor Client Appointment Keeping, an Unsuppressed Viral Load at Bugembe, Mpumudde, Walukuba and Budondo Health Centres in Jinja District – Uganda. Part of a PhD Study Results**

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## **Abstract**

*Uganda adopted the WHO 2014 test and treat guidelines in 2016, increasing the number of HIV clients diagnosed, started on treatment, and monitored for viral load suppression, against the inadequate health care resources. This has resulted into a low viral load suppression prevalence of 59.6%, and missed appointment of 7.9%. The study determined the occurrence of; poor adherence to HIV treatment, client appointment keeping, and viral load suppression at the study health facilities. The cross-sectional quantitative study was conducted in 4 purposively selected health centres. All files of adult HIV clients who had been in care for at least 6 month and active during October to December 2018 were studied for; missed appointments of more than two weeks, poor adherence to treatment of less than 85%, and unsuppressed viral load above 1000 viral copies per milliliter. 457(14.3%) of 3197 files had at least one of the study HIV care outcomes. Occurrence of the poor HIV care outcomes was the same irrespective of the client's duration in care. 51 (11.2%) of the client files had poor adherence to treatment, 301(65.9%) had missed appointments for more than two weeks, and 211(46.2%) had unsuppressed viral load. In conclusion, there is no difference in occurrence of the study poor HIV care outcomes based on duration in care. There is limited access to timely viral load tests, hence affecting timely and appropriate decision making.*

**Keywords:** *HIV care outcomes of adherence to treatment, appointment keeping and suppressed viral load.*

## **Introduction**

The Uganda Population-based HIV Impact Assessment (UPHIA) 2016-2017 report showed a reduced HIV prevalence from 7.3% in 2011, (1), to 6.0% among adults of 15 to 49 years of age. This translates to 1.2 million people aged 15 to 64 and 95000 children below 15 years of age living with HIV in Uganda, (2), of which only 56% are on treatment, (3). Viral load testing is noted to be the preferred method of monitoring the clinical response to HIV treatment, as it helps in early diagnosis and confirmation of treatment failure for appropriate patient management, (3 &4). It is evidenced that good adherence to ART promotes viral suppression and it is an important predictor of survival for HIV patients. Uganda has a low viral load suppression at prevalence of 59.6% Nationally and 48.8% for East central region, (2) ART client lost to follow of 21%, (3) and 7.9% miss appointments in HIV clinics, (5).

Uganda adopted the WHO 2014 test and treat guidelines embedded in its consolidated HIV prevention and treatment guidelines 2016. This has increased on the number of HIV clients diagnosed, started on treatment, and monitored for viral suppression, against the existing inadequate health structures, supplies, human resource, and equipment, (3). Jinja district with 28486 active HIV patients has 10.4% unsuppressed viral load based on tested client samples, (7). This study was to determine the extent of poor adherence to HIV treatment, poor client appointment keeping, and unsuppressed viral load at Bugembe, Mpumudde, Walukuba, and Budondo health centre IVs in Jinja district – Uganda.

## Methodology

The cross-sectional quantitative study was conducted in 4 health centres, notably; Bugembe, Budondo, Walukuba and Mpumudde, that were purposively selected due to their high patient workload. A census of the files of active adult HIV clients during the period of October to December 2018 were studied by trained research assistants for the poor HIV care outcomes of; missed appointments of more than two weeks, poor adherence to treatment of less than 85%, and unsuppressed viral load of above 1000 viral copies per milliliter. The data collection tools were developed by the researcher, data collected, tabulated, presented in percentages, and analyzed using Microsoft excel. The study and the study tools were approved by Mildmay Uganda Research and Ethics Review Committee and Uganda National Council of Science and Technology.

## Results

**Table 1.** Demographic data of client files screened for poor HIV care outcomes

Demographic element	Budondo H/C	Bugembe H/C	Mpumudde H/C	Walukuba H/C	Totals
Files screened	740	1064	550	843	3197
Files identified with any of the poor HIV care outcome	54	170	76	157	457
Percentage	7.3%	16.0%	13.8%	18.8%	14.3%

### Duration in HIV care of the identified clients

Duration in care, was one of the determinants for a file to be considered for the study. This is because only clients who have been in HIV care for at least 6 months are eligible for a viral load test by Uganda Ministry of health standards. The duration in care was categorized into four, from 6 months to 2 years, 2 years > 4 years, 4 years > 6 years, and > 6 years. The results are as in table 2 below.

**Table 2.** Percentages of study clients based on their duration in care

Duration in care	Budondo health centre	Bugembe health centre	Mpumudde health centre	Walukuba health centre	Total
0.5 to 2 years	11.1%	24.1%	23.7%	21.7%	21.7%
2 > 4 years	24.1%	21.2%	19.7%	27.4%	23.4%
4 > 6 years	37.0%	28.2%	25.0%	24.8%	27.6%
> 6 years	27.8%	26.5%	31.6%	26.1%	27.4%

### HIV care outcome indicators

#### Adherence to HIV treatment as an HIV care outcome indicator

Adherence to HIV treatment is very key in suppressing the viral load. The study determined the number of clients in HIV care who had a poor adherence to treatment less than 85%, as 51 (11.2%), with Budondo, Bugembe, Mpumudde, and Walukuba health centres having 12 (22.2%), 18 (10.6%), 21 (27.6%), and 0% respectively.

#### Adherence to appointment schedules as an HIV care outcome indicator

It is important that patients keep their appointment schedules not to have their pills finished and have nothing to swallow. From the study, it was observed that 301 (65.9%) of the study files identified with a poor HIV care outcome had more than two weeks missed appointments, with Budondo, Bugembe, Mpumudde, and Walukuba health centre IVs having 21 (38.9%), 109 (64.1%), 34 (44.7%), and 137 (87.3%) respectively. Secondly, client files reported to have missed appointment for more than two weeks were also studied for adherence score. It was revealed that; a total of 278 (92.3%) of files with missed

appointment of more than two weeks were scored an adherence of 85% and above, with Budondo, Bugembe, Mpumudde, and Walukuba health centres having 18 (85.5%), 98 (89.9%), 25 (73.5%), and 137 (100%) respectively.

### **Viral Load suppression as an HIV care outcome indicator**

Viral suppression is the ultimate goal of HIV treatment. Unsuppressed clients have increased chances of developing resistance to treatment, poor health outcome, and HIV transmission. The study revealed that, 211 (46.2%) of study client files with a poor HIV care outcome had unsuppressed viral load, with Budondo, Bugembe, Mpumudde, and Walukuba health centres having 36 (66.7%), 88 (51.8%), 40 (52.6%), and 47 (29.9%) respectively. The identified files with any of the study HIV outcomes also had 171 (37.4%) with undetectable viral load, notably; 15 (27.8%), 63 (37.1%), 24 (31.6%), and 69 (43.9%) for Budondo, Bugembe, Mpumudde, and Walukuba health centres respectively.

The study also identified that 36 (7.9) of the study files had never had a viral load done to the clients, with 1 (1.9%), 14 (8.2%), 6 (7.9%), and 15 (9.6%) for Budondo, Bugembe, Mpumudde, and Walukuba health centres respectively. 30 (83.3%) of clients who have never been done a viral load were between 6 months and 2 years in care. It was observed that, 159 (34.8%) of the study client files were overdue for a viral load to be done with Budondo, Bugembe, Mpumudde, and Walukuba health centres having 6 (11.1%), 65 (38.2%), 36 (47.4%), and 52 (33.1%) respectively. The study also showed that 192 (91%) of client files with unsuppressed viral load had adherence to treatment score of 85% and above, with Budondo, Bugembe, Mpumudde, and Walukuba health centres having 30 (83.3%), 78 (88.6%), 37 (92.5%), and 47 (100%) respectively.

### **Discussion**

It is anticipated that the longer a patient stays in care the more knowledgeable about the disease and compliance to the medical instructions. The study revealed that there is no difference in failure to keep appointment, poor adhere to treatment, and having unsuppressed viral load among patients who have stayed in care for a short time and those for a long time. In summary, findings show that duration of a client in HIV care does not guarantee having good HIV care outcomes. This could be attributed to patents getting used to the disease and lack of continuous psychosocial support to patients by the health workers. Based on the results, it is important that health workers continuously engage the HIV clients under their care to ensure that adequate knowledge and psychosocial support is offered to all patients irrespective of their duration in care.

Adherence to HIV treatment is very key in suppressing the viral load, however, the study found a significant number of clients in HIV care who had a poor adherence to treatment of less than 85%, except for Walukuba health centre. In practice, and in the Ugandan HIV clinics, it is almost impossible to find all the patients adhering to HIV treatment in a heavy HIV clinic like that of Walukuba health centre. It is possible that the health workers could be having challenges in assessing adherence or the documentation could be automatic that every patient is recorded to have an adherence of above 85%. The clinic health workers need to be inquired from to understand this occurrence of adherence above 85% for every patient yet many patents from some facility were reported to have missed appointment for more than two weeks.

It is important that patients keep their appointment schedules, so as not to have their pills finished before they are refilled. The study revealed that a significant number of clients in the study HIV care clinics missed their appointment schedules for more than two weeks in the review period. This is a sign of poor adherence to treatment, or a sign that health workers are refilling more drugs to the patents compared to the return dates recorded. This can be supported by the fact that some, client files reported to have missed appointment for more than two weeks had a good adherence score. The health workers need to harmonize the drugs supplied with the scheduled dates to change this scenario.

Viral load suppression is the ultimate goal of the HIV treatment. Unsuppressed clients have increased chances of developing resistance to treatment, poor health outcome, and HIV transmission. The study revealed that a significant number of clients in HIV care had unsuppressed viral load. Only 37.4% of the study files had undetectable viral load, and this is affecting the HIV program to achieve the UNAIDS

targets of achieving 90% viral load suppression. The study health facilities have to put up efforts to reduce on the unsuppressed clients.

Ministry of health of Uganda provided standards on when to do a viral test to a patient, however a good number of the study files showed that 7.9% of the study clients had never been done a viral load yet they were eligible. On the same point still, a good number of clients were overdue for a viral load retest, especially at Mpumudde, and Walukuba health centres. This affects the quality of HIV care as timely and appropriate decisions are not always made. The study to show that 91% of client files with unsuppressed viral load had an adherence to treatment score of 85% and above, may be an indicator of resistance to treatment or poor adherence assessment.

## **Conclusion**

In conclusion, there is no difference in occurrence of the study poor HIV care outcomes based on duration in care. There is inadequate capacity of health workers to assess adherence to HIV treatment, and limited access to timely viral load tests, hence affecting timely and appropriate decision making.

## **References**

- [1]. <http://health.go.ug/docs/UAIS2011KEYFINDINGS.pdf>
- [2]. <http://www.afro.who.int/sites/default/files/2017-08/UPHIA%20Uganda%20factsheet.pdf>
- [3]. MoH (2016). Consolidated guidelines for HIV prevention, and treatment in Uganda 2016.
- [4]. WHO, (2013). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. Geneva Switzerland: World Health Organization; 2013. [http://apps.who.int/iris/bitstream/10665/85321/1/9789241505727\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/85321/1/9789241505727_eng.pdf).
- [5]. Setor Kunutsor,1 John Walley,1 Elly Katabira,2 Simon Muchuro,2 Hudson Balidawa,3 Elizabeth Namagala,3 and Eric Ikoona3, (2010). Clinic Attendance for Medication Refills and Medication Adherence amongst an Antiretroviral Treatment Cohort in Uganda: A Prospective Study. Hindawi Publishing Corporation AIDS Research and Treatment Volume 2010, Article ID 872396, 8 pages doi:10.1155/2010/872396.
- [6]. Jinja District health report, 2016/17.