EURASIAN EXPERIMENT JOURNAL OF PUBLIC HEALTH (EEJPH) ISSN: 2992-4081 ©EEJPH Publications Volume 5 Issue 1 2024

Page | 78 Exploring Factors Contributing to Non-Adherence to Antiretroviral Therapy among Young Adults with HIV: A Study at Jinja Regional Referral Hospital

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ABSTRACT

Non-adherence to antiretroviral therapy (ART) remains a significant concern in HIV management, particularly among young adults. This study investigates the factors associated with non-adherence to ART among young adults attending Jinja Regional Referral Hospital in Uganda. Through a cross-sectional study design, 100 participants meeting inclusion criteria were consecutively recruited. Socio-demographic, economic, and health-related factors were examined. Findings revealed that factors such as age, marital status, occupation, level of education, number of dependents, monthly earnings, distance to health facilities, drug use, disclosure of HIV status, duration on ART, and CD4 count were significantly associated with non-adherence. Notably, younger age, being single, primary level of education, unemployment, longer distance to health facilities, drug use, non-disclosure of HIV status, shorter duration on ART, and higher CD4 counts were linked to higher rates of non-adherence. These findings underscore the complexity of adherence behavior and highlight the importance of tailored interventions to address diverse socio-economic and health-related challenges faced by young adults living with HIV.Keywords: Non-adherence, Antiretroviral therapy, Young adults, HIV.

INTRODUCTION

Scientists believe that human immunodeficiency virus (HIV) originally came from a virus particular to chimpanzees in West Africa during the 1930s and originally transmitted to humans through hunting. Over the decades, the virus was spread through Africa and to other parts of the world. However, it wasn't until the early 1980s, when rare types of pneumonia, cancer and other illness were reported to doctors that the world became aware of HIV and acquired immune deficiency syndromes (AIDS) [1, 2]. In 1981 in the US, reporting of unusually high rates of rare forms of pneumonia and cancer in young gay men. The disease was initially called Gay-related Immune Deficiency (GRID) because it was thought to affect only gay men. In 1982, the disease was renamed Acquired Immune Deficiency Syndrome (AIDS). It was realized that the infection can be sexually transmitted and caused by HIV. Cases were also reported in blood transfusion products [3, 4]. In 1983, it was discovered that women can also become infected with AIDS through heterosex. In 1987, the first anti-retroviral drug (AZT) was approved. In 1997, UNAIDS estimates, there are 30 million people living with HIV and AIDS worldwide, with 16,000 new infections daily. In 1999, the WHO announced that AIDS was the fourth biggest cause of death worldwide and number one killer in Africa. Antiretroviral therapy (ART) is a proven treatment for HIV/AIDS patients in improving the health status and quality of HIV/AIDS patients by reducing the rate of disease progress. Appropriately taking the treatment is the advisable option in order to obtain full benefits of ART [3, 5-7]. Poor adherence is a notable public health in developing countries. An individual is considered as non-adherence for ART if he/she had a history of taking doses 2 or more hours before and 2 or more hours after the time of doctor's advice to take doses or missing doses. In 2012, over 9.7 million people living with in low- and middle-income countries were receiving ART, however, ensuring that endurance of the ART regimens remains challenging in all countries [8]. In the early 1990s, Uganda had the highest prevalence of HIV in the world. In response, the Government implemented strong preventive measures through a policy of openness, public information, communication and education, and national and international collaboration through a partnership involving the private and public sectors [9]. This approach succeeded in reducing HIV prevalence from over 30% in some sentinel sites to the current level of 7% [10]. Although HIV prevalence remains unacceptably high, Uganda offers one of the most hopeful scenarios in Africa and is seen as a model to emulate [10]. In 1986, Uganda established the AIDS Control Programme (ACP) in the MoH. The UAC

was established in 1992 to coordinate multisectoral approaches to HIV, of which one of the major initiatives was the introduction of interventions for the prevention of mother-to-child transmission (pMTCT) of HIV through the UNAIDS-brokered Accelerating Access Initiative [11]. This initiative is a partnership involving UN agencies and a number of pharmaceutical manufacturers who have offered to supply products at reduced prices in resource-poor countries. Other Government strategies for prevention include an emphasis on the "ABC" strategy (Abstinence, Be faithful, Condom use) [12]. Joint initiatives between international organizations such as UNAIDS and private Page | 79 organizations such as the Joint Clinical Research Centre (JCRC) helped to reduce the cost of antiretroviral drugs (ARVs), making them accessible to many more people. The importation of cheaper generic drugs into the country by private institutions such as JCRC has caused pharmaceutical companies to significantly reduce the price of some patented ARVs [13]. As AIDS became the second highest cause of death in Uganda after malaria, the JCRC was established in 1991, with support from the Government, as the country's first AIDS treatment research centre. However, since ART was very expensive only a few government officials and other high-income people could access the medicines. Even after securing permission to import generic ARVs, prices were still prohibitively high for the general population. ARV medications became more widely available in Uganda in 2004 when the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the US President's Emergency Plan for AIDS Relief (PEPFAR) came in to support the provision of ART for people with AIDS [14]. These two agencies provided unprecedented multilateral support and enabled the scaling up of access to ART. In June 2004, the Government of Uganda implemented an ARV programme in one national referral hospital (Mulago), in all 11 regional referral hospitals and 11 district hospitals, providing ARVs to 2700 patients. In addition to the Government facilities, some nongovernmental (private not-for-profit) organizations also provide ART. The foremost of these are: The AIDS Support Organization (TASO) with 6600 patients; JCRC which provides ARVs to 18 000 people through its various sites across the country; and Mild may International Centre with 2500 clients on ART. Others include Uganda Cares, Medical Access and the Uganda According to the cognitive behavior theory, cognitive perspective on health behavior is based upon the assumption that our thoughts and beliefs influence our emotions and behaviors. It focuses attention on how patients conceptualize health threats and appraises factors that facilitate adherence or serve as barriers to treatment $\lceil 15 \rceil$. The concept of keeping treatment adherence should start from the earliest involvement inpatient care. Retention in care of HIV infected patients also reflects treatment success at individual levels [16]. In Uganda, there is growing concern about loss to follow-up and sub-optimal adherence to ART as significant barriers to care. Although Uganda is described in most literature as a success story to emulate in sub-Saharan Africa [10], there was a need to assess the quality of care and adherence among receiving these life-extending medicines ART. Non-adherence among HIV patients remains a public health concern. Poor adherence to ART is an important concern relating to HIV management [17]. The minimal level of adherence required for anti-retroviral drugs to work is 95%. No or partial adherence is associated with detectable viral loads, declining CD4 cell count, disease progression, episodes of opportunistic infections, poor health outcomes in addition to development of drug resistant strains of the virus. Proper patients' adherence to antiretroviral therapy is crucial in achieving optimal treatment outcomes [18]. HIV is a serious public health problem in Uganda, together with malaria and tuberculosis. Identifying the factors contributing to non-adherence to antiretroviral therapy in young adults with HIV in Jinja Regional Referral Hospital as well as determining the prevalence of non-adherence to ART in young adults and associated risk factors in Jinja Regional Referral Hospital (JRRH) is the aim of this study.

METHODOLOGY

Study Design

The study was a cross sectional and descriptive research design which will involve both qualitative and quantitative data collection and analysis.

Area of Study

Jinja Regional Referral hospital commonly known as Jinja Hospital is a hospital in the city of Jinja, eastern Uganda. It is the largest hospital in Eastern Uganda, with a bed capacity of 600, although many more patients are admitted, with many sleeping on the floor. The hospital is located in the center of Jinja, not far from the source of the Nile. It is the Regional Referral Hospital for the districts of Bugiri, Iganga, Jinja, Kaliro, Kamuli, Mayuge, Kayunga and parts of Mukono. The coordinates of Jinja Hospital are 00 25 52N, 33 12 18E (Latitude: 0.4310; Longitude 33.2050) state how many patients visit the ART clinic per year and the age ranges.

Sample Size Determination

Using the Kish Leslie formula [19]N = Z2 P Q \div E2 Where; N = sample size Z, is the standard normal deviation which is at 95% confidence interval (1.96)

P, proportion of a characteristic in a sample, 7% [20]

Q, population proportion = (1 - P)

E, marginal of error precision = 0.05

 $N = 1.962 \times 0.07 (1 - 0.07)$

 $\begin{array}{c} 0.052\\ \hline \text{Page} \mid 80 \quad \text{N} = 100 \text{ respondents} \end{array}$

100 respondents were interviewed by the principal investigator in this study

Sampling Method

The simple random sampling technique which entails every patient who is HIV positive between 18 to 50 years of age attending Jinja Regional Referral Hospital and there was an equal chance of being part of the sample.

Inclusion Criteria

All young adults in their reproductive age (18-50 years) who are HIV positive and are on ART attending Jinja Regional Referral Hospital.

Exclusion Criteria

Patients who are HIV positive but did not consent for the study excluded.

Patients who are HIV positive but not ARVs

Patients who are HIV negative. Automatically nullifies them, hence not need in the exclusion criteria.

Data Collection Methods

The researcher visited the hospital with an introductory letter from the faculty of clinical medicine and dentistry. After being introduced to the clinical and surgical staff, oriented his research assistant, and data was collected from only those patients who consented.

Analysis of Data

Quantitative data was coded and entered into statistical package for social scientists (SPSS version 16.0) and cleaned. Exploration of data was done by SPSS IBM version 20.0.

Ethical Consideration

Approval was sought from the Institutional Review Board and ethics committee of KIU. The permission to carry out research was obtained from the hospital executive director before data is collected. Data can be coded to provide privacy and confidentiality to the patient's data. Before data collection, the objectives of the study were fully explained to the records assistant to ensure his/her permission.

RESULTS

The Socio Demographic and Economic Factors Associated with Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral Hospital.

A total of 100 young adults with HIV were enrolled in the study. The majority of the participants were female with 58% (58/100) and the remaining were male with 42 (42/100).

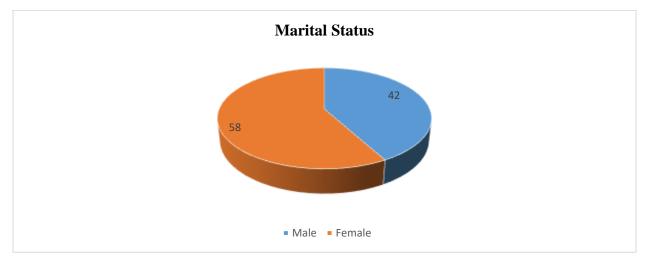


Figure 1 showing age group of the respondents

Majority 29(29%) of the respondents belonged to the age group of 31 and above years while the least 19(19%) belonged to the age group of 15-18 years. The results are shown in the figure below;

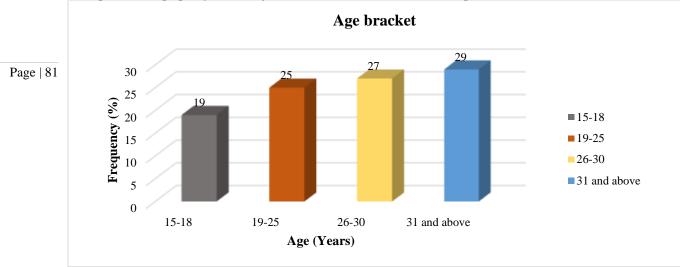
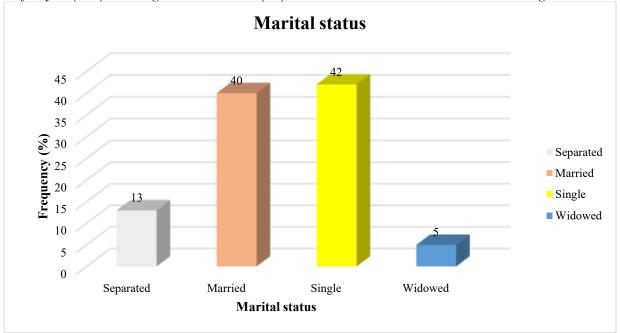
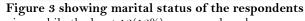


Figure 2 showing age bracket of the respondents Majority 42 (42%) were single while the least 5(5%) were widowed. The results are shown in the figure below;





Majority 33(33%) were housewives while the least 12(12%) were employed

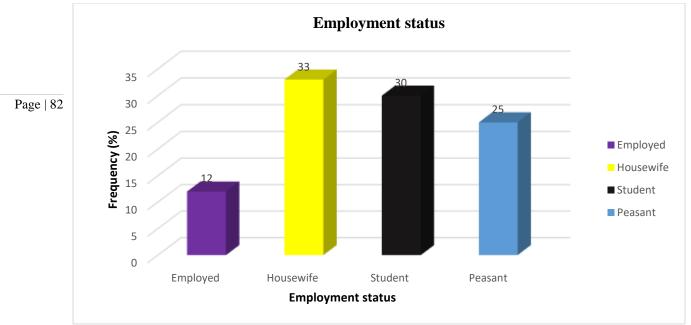


Figure 4 shows employment status

Most 36(36%) were Catholics while the least 18(18%) were from other releigion. The results are shown in figure 5 below;

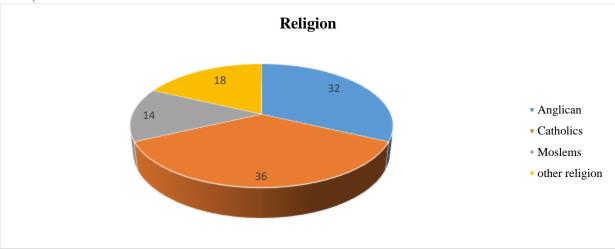


Figure 5 showing religion of the respondents

Majority 47(47%) of the respondents belonged to tertiary level of education while the least 14(14%) attained primary level of education.

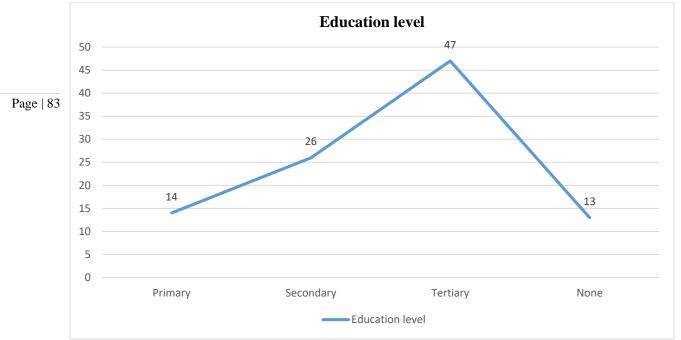


Figure 6 showing religion of the respondents

Majority of the respondents had 4-5 number of dependents while the least had no dependents. The results are presented in the figure below;

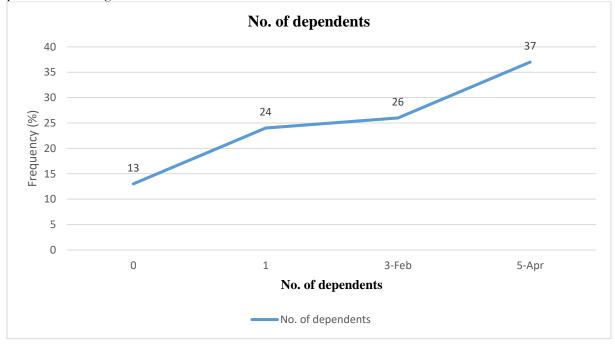


Figure 7: shows number of dependents

Majority 34(34%) were earning in a range of UGX 180,000 - 360,000 while the least 11(11%) were not willing to disclose their earnings. The overall results about respondents earning are presented in the figure below;

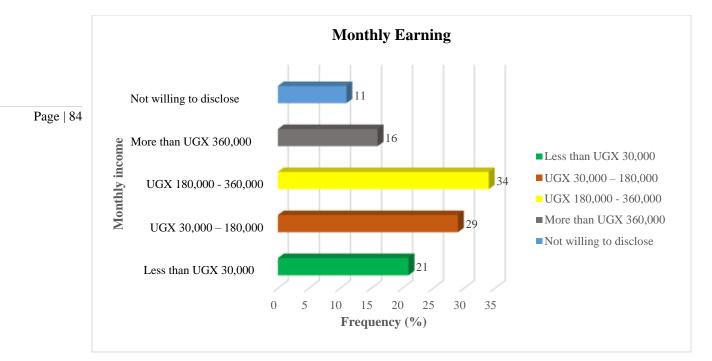


Figure 8: shows monthly earnings of the respondents Table 1: showing the demographic characteristics of the sample.

Variable	Frequency (n=100)	Percentage (%)	
Gender			
Male	42	42	
Female	58	58	
Age bracket			
15-18	19	19	
19-25	25	25	
26-30	27	27	
31 and above	29	29	
Marital status			
Separated	13	13	
Married	40	40	
Single	42	42	
Widowed	5	5	
Occupation			
Employed	12	12	
Housewife	33	33	
Student	30	30	
Peasant	25	25	
Religion			
Anglican	32	32	
Catholics	36	36	
Moslems	14	14	
other religion Level of education	18	18	
Primary	14	14	
Secondary	26	26	
Tertiary	47	47	
None	13	13	
No. of dependents			
0	13	13	
1	24	24	
2-3	26	26	
4-5	37	37	
Earn in a month			
Less than UGX 30,000	21	21	
UGX 30,000 - 180,000	29	29	
UGX 180,000 - 360,000	34	34	
More than UGX 360,000	16	16	
Not willing to disclose	11	11	

Prevalence of Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral Hospital

The prevalence of non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja Regional Referral Hospital was found to be 11%.

Table 2: shows the prevalence of non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja regional Referral

Page 85	attending at Jinja regional Referral		
	Variable	Frequency	Percentage (%)
	Adherence to antiretroviral therapy status		
	(n=100)		
	Non-adherence	11	11
	Adherence	89	89

Association of Demographic Factors with Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral Hospital

Age bracket, marital status, occupation, level of education, no. of dependents and monthly earning were statistically significantly associated with non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja regional referral in the model at 5% level. HIV patients who were in age group of 15 - 18 years were 7 times more likely not to adhere to antiretroviral therapy compared to those in 19-25 age group (OR=7.73: 95%CI, 2.41-27.2: P<0.001). HIV patients who were single were 3 times more likely not to adhere to antiretroviral therapy compared to those who were separated (OR=3.29: 95%CI, 1.94–5.57: P=0.005). HIV patients who were students were 6 times more likely not to adhere to antiretroviral therapy compared to those who were peasant (OR=6.36: 95%CI, 0.23-9.73: P=0.001). HIV patients who had primary level of education were 8 times more likely not to adhere to antiretroviral therapy compared to those who were estudents who were at secondary level (OR=8.98: 95%CI, 2.03-19.47: P=<0.001). HIV patients with no number of dependents were 9 times more likely not to adhere to antiretroviral therapy compared to those who had one dependent (OR=9.11: 95%CI, 1.24–19.02: P<0.001). HIV patients who were not will to disclose their monthly income were 5 times more likely not to adhere to antiretroviral therapy compared to those who were earning UGX 30,000 – 180,000 (OR=5.19: 95%CI, 0.91-10.36: P=0.001).

	Variable	Adherence to antiretroviral		OR (95% CI)	P-Values
		Non-adherence	Adherence	_	
		n=11	n=89		
Page 86	Gender				
	Male	5(11.9%)	37(88.1%)	ref	
	Female	6(10.3%)	52(89.7%)	1.87 (0.91-2.73)	0.072
	Age bracket			X	
	15-18	5(26.3%)	14(73.7%)	7.73(2.41 - 27.2)	< 0.001
	19-25	2(8%)	23(92%)	ref	
	26-30	1(3.7%)	26(96.3%)	1.32(0.27-4.61)	0.933
	31 and above	3(10.3%)	26(89.7%)	1.44(0.49-5.34)	0.086
	Marital status				
	Separated	1(7.7%)	12(92.3%)	ref	
	Married	3(7.5%)	37(92.5%)	1.47(0.86 - 2.53)	0.620
	Single	7(16.7%)	35(83.3%)	3.29 (1.94–5.57)	0.005
	Widowed	0(0%)	4(100%)	1	
	Occupation				
	Employed	2(16.7%)	10(%)	0.36(3.18-1.63)	0.071
	Housewife	0(0%)	33(100%)	1	
	Student	7(23.3%)	23(76.7%)	6.36(0.23-9.73)	0.001
	Peasant	2(8%)	23(92%)	ref	
	Religion				
	Anglican	3(9.4%)	29(90.6%)	1.24(1.76 - 1.95)	0.063
	Catholics	2(5.6%)	34(94.4%)	ref	
	Moslems	3(21.4%)	11(78.6%)	5.20(1.34 - 13.06)	0.001
	other religion	2(11.1%)	16(88.9%)	0.28(1.02-1.36)	0.340
	Level of education				
	Primary	5(35.7%)	9(64.3%)	8.98(2.03 - 19.47)	< 0.001
	Secondary	2(7.7%)	24(92.3%)	ref	
	Tertiary	1(2.1%)	46(97.9%)	1.87(0.82 - 1.78)	0.373
	None	3(23.1%)	10(76.9%)	3.15(1.06-1.38)	0.004
	No. of dependents				
	0	5(38.5%)	8(61.5%)	9.11(1.24 - 19.02)	< 0.001
	1	3(12.5%)	21(87.5%)	ref	
	2-3	1(3.8%)	25(96.2%)	1.87(0.41–1.98)	0.373
	4-5	2(5.4%)	35(94.6%)	1.14(1.22 - 1.72)	0.142
	Earn in a month				
	Less than UGX 30,000	4(19.0%)	17(81.0%)	4.11(1.2-8.42)	0.003
	UGX 30,000 – 180,000	2(6.9%)	27(93.1%)	ref	0.013
	UGX 180,000 - 360,000	2(5.9%)	32(94.1%)	1.24(1.76-1.95)	0.012
	More than 360,000	0(0%)	16(100%)	1 5 10(0 01 10 8C)	0.001
	Not willing to disclose	3(27.3%)	8(72.7%)	5.19(0.91-10.36)	0.001

Table 3: shows demographic factors associated with non-adherence to antiretroviral therapy among young adults with HIV

Association of Health-Related Factors with Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral Hospital

Distance to the health facility, drug use, disclosure to people you live with, time on ART and latest CD4 count were found to be statistically significantly associated with non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja Regional Referral in the model at 5% level. HIV Patients who were more than 5km distance from the health center were 3 times more likely not to adhere to antiretroviral therapy compared to those who 1km away (OR=3.33: 95%CI, 1.17-10.22: P=0.009). HIV Patients who were drug users were 7 times more likely not to adhere to antiretroviral therapy as compared to those who were not drug users (OR=7.93: 95%CI, 1.83-14.74: P=0.001). HIV Patients who did not disclose their HIV status to people they live with were 6 times more likely not to adhere to antiretroviral therapy compared to those who disclosed their HIV status (OR=6.12: 95%CI,

0.33-11.65: P=0.001). HIV patients who had 0 – 1 year period on ART were 5 times more likely not to adhere to antiretroviral therapy compared to those who had spent more than 4 years (OR=5.53: 95%CI, 1.86-13.72: P=0.002). Patients who had their latest CD4 count more than 500cells/mm were 2 times more likely not to adhere to antiretroviral therapy compared to those who had less than <500cells/mm (OR=2.99: 95%CI, 0.53-10.01: P=0.013). Table 4: Shows the Health-Related Factors Associated with Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral

Variable	Adherence to antiretroviral therapy		OR (95% CI)	P-Values
	Non-	Adherence		
	adherence n=11	n=89		
Distance to the health facility				
1 km	1(3.6%)	27(96.4%)	ref	
2 – 3km	3(12.5%)	21(87.5%)	1.22(0.74 - 2.11)	0.067
4-5km	3(13.6%)	19(86.4%)	2.51 (1.61–9.36)	0.041
More than 5km	4(15.4%)	22(84.6%)	3.33 (1.17-10.22)	0.009
Drug use				
Yes	5(29.4%)	12(70.6%)	7.93(1.83 - 14.74)	0.001
No	6(7.2%)	77(92.8%)	ref	
Disclosure to people you live				
with				
Yes	7(8.4%)	76(91.6%)	ref	
No	4(23.5%)	13(76.5%)	6.12(0.33 - 11.65)	0.001
Time on ART				
0 – 1 year	5(20%)	20(80%)	5.53 (1.86 - 13.72)	0.002
2 - 3 years	2(6.7%)	28(93.3%)	0.71(0.34-1.93)	0.891
3-4 years	3(11.1%)	24(88.9%)	1.37(0.89-2.45)	0.012
More than 4 years	1(5.6%)	17(94.4%)	ref	
Latest CD4 count				
< 500ells/mm	1(5.6%)	17(94.4%)	ref	
>500cells/mm	10(12.2%)	72(87.8%)	2.99(0.53 - 10.01)	0.013

DISCUSSION

Prevalence of Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral

The prevalence of non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja Regional Referral Hospital was found to be 11%. This prevalence is slightly higher than that of a study by [21] which showed a prevalence of 9.3% in and lower than that in the study by [22] which showed that there was a high prevalence of 13.9% non-adherence to antiretroviral therapy among people HIV. In contrast with this study, a study done in a rural community clinic in Kabale Western Uganda, by [23] reported a higher prevalence of non-adherence to antiretroviral therapy which was at 14.1%.

Socio Demographic and Economic Factors Associated with Non-Adherence to Antiretroviral Therapy among Young Adults with HIV Attending at Jinja Regional Referral.

In this study, HIV patients who were in age group of 15 - 18 years were 7 times more likely not to adhere to antiretroviral therapy compared to those in 19-25 age group (OR=7.73: 95%CI, 2.41-27.2: P<0.001). The above findings are in contrast with the study findings by Beer et al. [22] which found out that with the exception of the elderly, adherence increases with age. The above two studies associated with ART adherence, sub-optimal adherence showed a positive correlation with being younger [24]. Studies also demonstrated variable results on the association of age and female sex were significantly associated with low level of adherence [22]. HIV patients who were single were 3 times more likely not to adhere to antiretroviral therapy compared to those who were separated (OR=3.29: 95%CI, 1.94–5.57: P=0.005). HIV patients who were students were 6 times more likely not to adhere to antiretroviral therapy compared to those who were peasant (OR=6.36: 95%CI, 0.23-9.73: P=0.001). The above findings are in line with the study findings by [25] which revealed that students are always so shy and therefore want to keep it secret with other friends who are not HIV positive therefore end up missing their ART. HIV patients who had primary level of education were 8 times more likely not to adhere to antiretroviral therapy compared to those who are not HIV positive therefore end up missing their ART. HIV patients who had primary level of education were 8 times more likely not to adhere to antiretroviral therapy compared to those who are not HIV positive therefore end up missing their ART. HIV patients who had primary level of education were 8 times more likely not to adhere to antiretroviral therapy compared to those who were at secondary level (OR=8.98: 95%CI, 2.03–19.47: P=<0.001). The above findings are supported by

Page | 88

a study findings by [26] which revealed that a lower level of Education and poorer literacy may impact negatively on some patient's ability to adhere, while a higher level of Education has a positive impact. HIV patients with no number of dependents were 9 times more likely not to adhere to antiretroviral therapy compared to those who had one dependent (OR=9.11: 95%CI, 1.24–19.02: P<0.001). The above findings are contradicting with the study findings by [27] on HIV and AIDS situation in Africa which revealed that people who have many dependents spend much and therefore fail to get funding to go to the hospital for their ART services. HIV patients who were not will to disclose their monthly income were 5 times more likely not to adhere to antiretroviral therapy compared to those who were earning UGX 30,000 – 180,000 (OR=5.19: 95%CI, 0.91-10.36: P=0.001). The above findings are in line with the study findings by [28] which demonstrated significant association of non-adherence with certain sociodemographic factors such as low literacy or education, lower individual or family income, unemployment, not

Health Related Factors Associated with Non-Adherence to Antiretroviral Therapy Among Young Adults with HIV Attending at Jinja Regional Referral.

participating in any religious activities, poor living conditions and not having any insurance plan.

The study findings showed that HIV Patients who were more than 5km distance from the health center were 3 times more likely not to adhere to antiretroviral therapy compared to those who 1km away (OR=3.33: 95%CI, 1.17-10.22: P=0.009). The findings are supported by the findings of by [29] who revealed that long distances to health facilities impact on adherence despite the fact that adherence is said to be 90% amongst people taking ART in sub-Saharan Africa, transportation over long distances from health facilities remains an important barrier to sustain adherence to medications. HIV Patients who were drug users were 7 times more likely not to adhere to antiretroviral therapy compared to those who were not drug users (OR=7.93: 95%CI, 1.83-14.74: P=0.001). The above findings are supported by the study findings of $\lceil 21 \rceil$ which revealed that the use of illicit drugs and alcohol consumption was significantly associated with low levels of adherence. A study identified the level of alcohol consumption and nonadherence. Smoking and alcohol habits were also found to be associated with non-adherence to ART [30]. HIV Patients who did not disclose their HIV status to people they live with were 6 times more likely not to adhere to antiretroviral therapy compared to those who disclosed their HIV status (OR=6.12: 95%CI, 0.33-11.65: P=0.001). The above findings were in contrast with the study findings by $\lceil 31 \rceil$ which revealed that people who did not reveal their status to their friends were more likely to adhere to ART because they fear the signs to show on them. HIV patients who had 0-1 year period on ART were 5 times more likely not to adhere to antiretroviral therapy compared to those who had spent more than 4 years (OR=5.53: 95%CI, 1.86-13.72: P=0.002). The above findings were in line with the study findings by [32] which revealed that HIV patients who at their start of ART attendance are always shy and therefore fear to attend for other people not to see them. Patients who had their latest CD4 count more than 500cells/mm were 2 times more likely not to adhere to antiretroviral therapy compared to those who had less than <500cells/mm (OR=2.99: 95%CI, 0.53-10.01: P=0.013). The above findings are supported by the study findings of [33] which revealed that HIV patients with stable CD4 count tend to relax as compared to those with low CD4 count.

CONCLUSION

This study makes important contributions with respect to incidence of non-adherence to antiretroviral therapy. However, a number of limitations in the findings of the study emerged and include. The study used self-reporting of non-adherence, which might have introduced social desirability bias. This was a hospital-based sample which is not representative of the community hence the results may not be generalized to the community population. Data was collected over a short period of only seven weeks hence the study participants were not well distributed across the calendar year. From the study findings, age bracket, marital status, occupation, level of education, no. of dependents and monthly earning were statistically significantly associated with non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja regional referral in the model at 5% level at Jinja Regional Referral. Distance to the health facility, drug use, disclosure to people you live with, time on ART and latest CD4 count were found to be statistically significantly associated with non-adherence to antiretroviral therapy among young adults with HIV attending at Jinja Regional Referral in the model at 5% level at Jinja Regional Referral.

Recommendation

Clinicians should proactively screen for lifestyle behaviours, HIV-associated stigma and ART side-effects at every clinic visit young patients. Regular counselling on adherence and healthy lifestyle, and prompt management of ART side-effects would improve adherence in the study setting.

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Page | 89 4.

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Page | 90