Original Research Article

Assessing Compliance to Antiretroviral Therapy and Well-being among HIV-Positive Adolescents and Young Adults at Buea Regional Hospital

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Abstract: Despite initiatives by the WHO and the International AIDS Control Program, including free HIV screenings and antiretroviral therapy (ART), many adolescents and young adults struggle with treatment compliance. This study aimed to assess ART compliance among HIV-positive adolescents and young adults and evaluate their sense of well-being at the Buea Regional Hospital. A cross-sectional study was conducted from June 1 to August 31, 2022, using a convenient sampling technique to enroll 150 consenting participants. A structured questionnaire gathered data on demographics and ART compliance. Data analysis was performed using SPSS version 26 and Excel 2013, with a significance level set at 0.05. Results indicated an overall compliance rate of 68.7%. Notably, participants reported that feeling depressed was significantly linked to both adherence to and discontinuation of medication (p=0.016 and p=0.010, respectively). The most common emotional struggle was a lack of interest in daily tasks, affecting 16.4% of respondents. Despite these challenges, 76.0% of participants reported a positive sense of well-being, indicating minimal distress in the preceding two weeks. In conclusion, HIV remains a prevalent chronic viral infection among adolescents and young adults. Understanding the factors influencing compliance with ART at the Buea Regional Hospital is critical for enhancing treatment outcomes and improving the overall well-being of this demographic. Addressing mental health and emotional support may be vital in improving adherence rates.

Keywords: Adolescents, Antiretroviral Therapy, Compliance, Well-Being, Young Adults.

INTRODUCTION

Acquired immunodeficiency syndrome (AIDS) is caused by Human Immunodeficiency Virus (HIV). HIV is one of the most common chronic viral infections all over the world affecting all age groups especially adults (CDC, 2008). HIV infection was first described in 1981 in San Francisco and New York City (Emedicine, 2009).

HIV is transmitted from person to person through several ways as follows; Sexual intercourse with an infected person: Vaginal, anal or oral sex without the use of condom with infected people accounts for a vast majority of sexually transmitted HIV in the world. However, oral route has a low transmission rate. Usage of unsterilized sharp objects which have been used on an infected person is a means of transmission. Through infected blood: when infected blood is donated to a person through blood transfusion, the disease can be transmitted.

Globally, 38.4 million people are living with HIV. An estimated 0.7% of adults aged 15-49 years worldwide are living with HIV, though the burden of the epidemic continues to differ significantly between countries and regions. The World Health Organization (WHO) states that the African Region remains most severely affected, with almost 1 in every 25 adults (3.4%) living with HIV Which is an estimate of more than two-thirds of the people living with HIV (PLHIV) worldwide (WHO, 2022). In Cameroon, the prevalence of HIV between the ages 15 to 49 was estimated at 3% and a reported number of 355,854 persons receiving ART of ages 15 and above followed by an estimated 11,000 AIDS related deaths of the ages 15 and above in 2020 (CDC, 2021). The prevalence is different in every region of the country with an interval starting from 1.2% in the Far North Region to 7.2% in the South Region. Also, an estimated incidence of HIV infection in the population was at 50,000 and 58,630 in 2011 and 2014 respectively (Enoné *et al.,* 2019).

In Cameroon, 79% of people diagnosed with HIV are on antiretroviral therapy (ART). About 34% of adolescents (10-19 years) and 60% of young adults (20-29 years) living with HIV have equally been placed on ART. In the South West Region, about 66% of 48,110 people diagnosed with HIV are on ART (Cameroon Country Operational Plan, 2022).

The WHO system for adults sorts patients into one of four hierarchical clinical stages ranging from stage 1 (asymptomatic) to stage 4 (AIDS). Patients are assigned to a particular stage when they demonstrate at least one clinical condition in that stage's criteria (Malamba *et al.,* 1999).

Stage 1:

Patients who are asymptomatic or have mild symptoms such as reoccurring fever, headache, conjunctivitis, pharyngitis or persistent generalized lymphadenopathy of at least two sites (not including inguinal) for longer than 6 months) are categorized as being in stage 1, where they may remain for several years (WHO, 2005).

Stage 2:

Even in early HIV infection, patients may demonstrate several clinical manifestations which include unexplained weight loss of less than 10 percent of total body weight and recurrent respiratory infections (such as sinusitis, bronchitis, otitis media, and pharyngitis), as well as a range of dermatological conditions such as herpes zoster flares, angular cheilitis, recurrent oral ulcerations, popular pruritic eruptions, seborrhoeic dermatitis, and fungal nail infections (WHO, 2007).

Stage 3:

As the disease progresses, additional clinical manifestations may appear. Those encompassed by the WHO clinical stage 3 (the moderately symptomatic stage) experienced weight loss of greater than 10% of total body weight, prolonged (more than 1 month) unexplained diarrhea, pulmonary tuberculosis, and severe systemic bacterial infections including pneumonia, pyelonephritis, empyema, pyomyositis, meningitis, bone and joint infections, and bacteremia. Mucocutaneous conditions, including recurrent oral candidiasis, oral hairy leukoplakia, and acute necrotizing ulcerative stomatitis, gingivitis, or periodontitis, may also occur at this stage (WHO, 2007).

Stage 4:

The severely symptomatic stage includes all of the AIDS-defining illnesses. Clinical manifestations for stage 4 disease that allow presumptive diagnosis of AIDS to be made based on clinical findings alone. This include wasting syndrome, *Pneumocystis pneumonia* (PCP), recurrent severe or radiological bacterial pneumonia, extra pulmonary tuberculosis, HIV encephalopathy, central nervous system (CNS) toxoplasmosis, chronic (more than 1 month) or orolabial herpes simplex infection, esophageal candidiasis, and Kaposi's sarcoma (WHO, 2007). Other conditions that should arouse suspicion that a patient is in this clinical stage include cytomegalovirus (CMV) infections (CMV retinitis or infection of organs other than the liver, spleen or lymph nodes), extra pulmonary Cryptococcus's, disseminated endemic mycoses (e.g. coccidiomycosis, penicilliosis, histoplasmosis), cryptosporidiosis, isosporiasis, disseminated non-

tuberculous mycobacteria infection, tracheal, bronchial or pulmonary candida infection, visceral herpes simplex infection, acquired HIV-associated rectal fistula, cerebral or B cell non-Hodgkin lymphoma, progressive multifocal leukoencephalopathy (PML), and HIV-associated cardiomyopathy or nephropathy (WHO, 2005). Most patients in this stage if not managed carefully may die.

Compliance describes the ability to take all ARVs in the correctly prescribed doses, at the prescribed time intervals and in the right manner, observing any dietary restrictions. Alternatively, it could mean a patient correctly following medical advice. Moreover, adherence in most cases is used interchangeably with compliance but compliance has a hierarchical controlling provider in charge connotation (Onyekwere, 2013).

Compliance to ART is an important factor in ensuring optimal clinical outcomes and is associated with improved survival among HIV/AIDS patients. Sustained high levels of compliance are essential for treatment success. Non-compliance to treatment has been associated with virologic, immunologic and clinical failure, and may increase the risk of resistance to first-line ART drugs (Bauleth, 2013). A study conducted in Cameroon reported a compliance rate of 83% (Bongfen *et al*., 2020) as compared to that of a previous study (59.6%) obtained in Ivory Coast among HIV-positive adolescents on ART (Eboua *et al*., 2018). HIV positive adolescents are less compliant to ART compared to adults, resulting to lower rates of immunological recovery and viral suppression (Villiera *et al*., 2022). As such, compliance to ART still remains a challenge in the care of young people living with HIV (Eboua *et al*., 2018). This study is therefore justified for as follows: first to identify factors associated with compliance with ART by HIV positive adolescents and young adults, which is of benefit to the health of the patients. Identifying factors that determine compliance with antiretroviral therapy, will help to bring down the incidence of ARV drug failure. In addition, this will ensure adequate intervention to encourage regular and consistent compliance to the ARV medication so that HIV positive adolescents and young adults could attain more than 95% compliance. Secondly a sound knowledge of these factors will increase clinicians and other health workers attention to compliance when working with PLHIV which can help to increase compliance. This will in turn improve the well-being of positive adolescents and young adults while abolishing the incidence of drug resistance and spread of the HIV virus. Lastly, this study intends to incorporate the findings of this research into the ART counselling of patients.

Antiretroviral drugs (ARDs) are classified into six distinct groups based on their molecular mechanisms and resistance profiles: Nucleoside-analog reverse transcriptase inhibitors (NRTIs) and Non-nucleoside reverse transcriptase inhibitors (NNRTIs), Intergrase Inhibitors, Protease inhibitors (PIs), Fusion inhibitors and Co-receptor antagonists (Arts and Hazuda, 2012).

First-line regimen combination consisting of 2 nucleoside reverse transcriptase inhibitors (NRTI) and 1 non-nucleoside reverse transcriptase inhibitor (NNRTI) are;
Preferred Protocol: Tenofovir + Lamivudine/ Emtricitabine + Efavirenz
Alternative Protocol: Zidovudine + Lamivudine + Nevirapine
Zidovudine + Lamivudine + Efavirenz
Zidovudine + Lamivudine + Nevirapine
Tenofovir + Lamivudine + Nevirapine
Specific Cases: Abacavir + Lamivudine + Efavirenz / Nevirapine
Zidovudine / Abacavir + Lamivudine + Lopinavir / Atazanavir

In case of toxicity, treatment failure and side effects, the initial regimen can be changed. ART is started with anyone whose CD4 count is less than or equal to 500 cells/ mm^3, HIV/ hepatitis B virus co-infection regardless of CD4 T-lymphocyte count, HIV positive in a serodiscordant couple, irrespective of CD4 count (only HIV positive partner is treated), HIV infected populations irrespective of CD4 count and pregnant women (National Guidelines on the Prevention and Management of HIV in Cameroon, 2015).

ART is beneficial in so many ways. The patient first benefits having a healthy life style void of the development of AIDS. Also, the sexual partner and any other individual who comes in contact with the patient's fluids has lesser chances of being infected (Bangsberg, 2006; Ford *et al*., 2010). ART has remarkable benefits when adhered to. The manner in which antiretroviral drugs are being distributed enables the patients to have a positive mindset, enables them to meet and interact with each other and develop a sense of belonging.

The specific Objective of the study was to identify the factors associated with compliance to ART among HIV positive adolescents and young adults.

Aim: To evaluate the degree of compliance to antiretroviral therapy (ART) and the sense of well-being among HIV-positive adolescents and young adults receiving treatment at Buea Regional Hospital.

Specific Objectives

1. To determine the overall compliance rate to ART among HIV-positive adolescents and young adults at Buea Regional Hospital.
2. To identify the demographic and psychological factors influencing compliance to ART in this population, including the impact of depression on treatment adherence.
3. To assess the sense of well-being of HIV-positive adolescents and young adults on ART, focusing on their mental health status and daily functioning over the past two weeks.

MATERIALS AND METHOD
Study Area:

This study was carried out at the Buea Regional Hospital (BRH) (Figure 3). The BRH, is located in the Buea Sub-Division, Fako Division, South - West Region of Cameroon. It is located on latitude 4° 8' 53.5" North and longitude 9° 14' 11.5" East. The mean annual rainfall is 2625mm with a constant humidity of 75 – 80 % (Wanji *et al*., 2003). The district has approximately 184,602 inhabitants (Buea District Health Service records, 2022). Buea consists mainly of the Bakweri people who happen to be the indigenes of the area. Immigrants from other parts of the country can also be found in the area (Wanji *et al*., 2003). It has an altitude of 4100m (Delancey, 2000). The activities carried out in the area are: farming, business, teaching, schooling and construction. BRH serves clients from all over Buea and its environs.
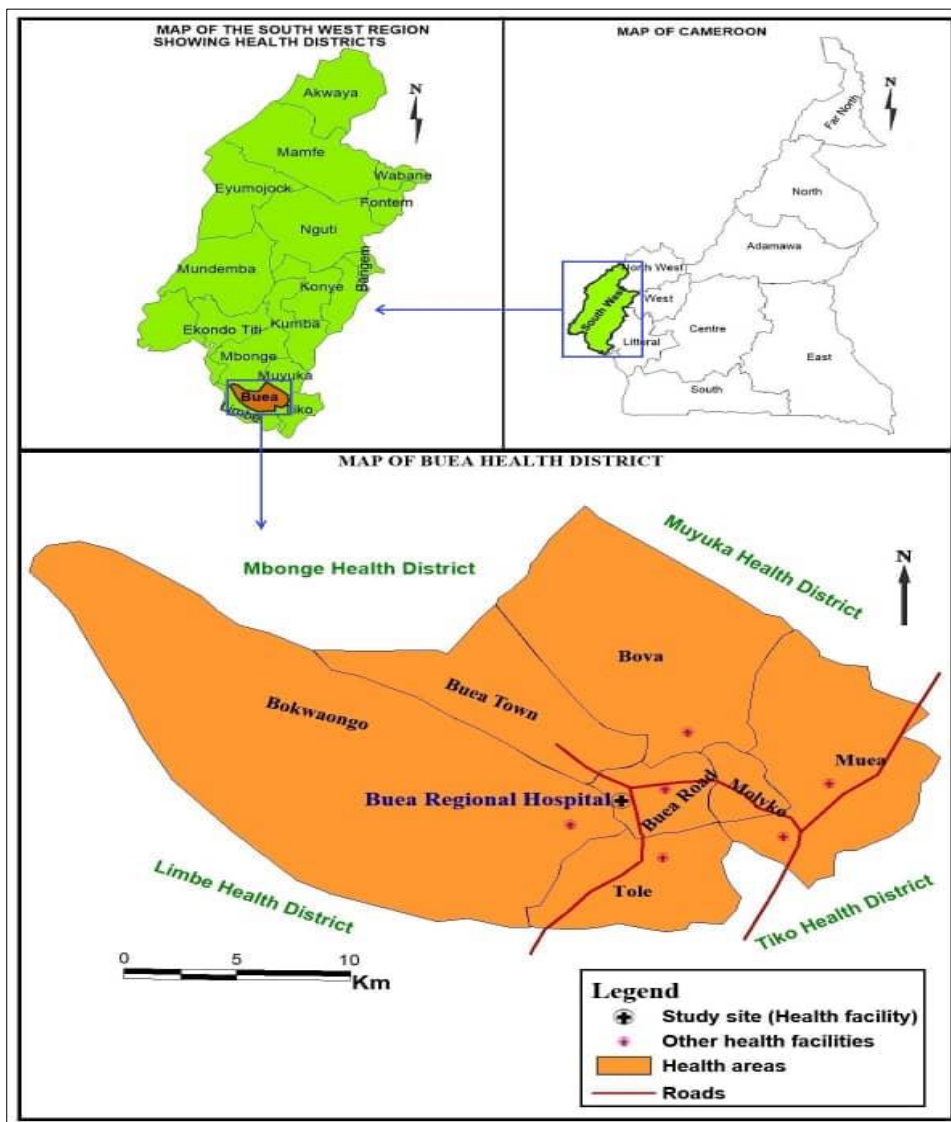

Figure 1: Map of the Buea Health District showing the Buea Regional Hospital
Source: Map derived using MapInfo Pro software version 11.

Study Design:
A cross-sectional study design was used to carry out this study at the Buea Regional Hospital from June 1st to August 31st, 2022.

Study Population:
Male or female adolescents and young adults receiving treatment for at least 6 months.

Inclusion Criteria:
i. Participants who are male or female adolescents and young adults, and who are 10-19 years and 20-30years of age respectively. They should have been receiving treatment at the treatment center for at least 6 months.

Exclusion Criteria:
Severely ill clients to participate, Participants who were less than 10 years of age

Sample Size Determination: Minimum sample size (n) = Z^2pq / e^2

Where the proportion of population with the characteristic p=0.62, 1-p= 1-0.62. At 95% confidence interval, the critical value $Z_{\alpha/2}$=1.96. An error margin (e) of 5%

Thus, 1.96^2 (0.62) (1 - 0.62) / 0.05^2 = 362 participants

However, according to Sekran (2003) rule of Thumb for sample size determination, a sample size greater than 30 and less than 500 is suitable for most qualitative research. Hence, a convenient sample size of 150 participants was used for the study that is, n=150 participants.

Sampling Technique:
Participants were selected by convenient sampling technique. Participants were enrolled for the study as they came for their regular meetings for follow up. Upon their arrival, the rationale of the study was explained to them.

Data Collection Tools:
The data was collected using self-administered semi-structured questionnaires consisting of closed and open-ended questions with information on their socio-demographic data of adolescent and young adults. Data obtained from the collection procedure were checked daily and the filled forms were put in a large envelope and stored in a cupboard to prevent it from destruction by insects. The questions were coded in SPSS (Statistical Package for Social Sciences) version 26 and the data collected were eventually entered in the data editor of SPSS. The data was checked for completeness by ensuring that all data were properly entered from the questionnaires. The data was also stored in Excel format and several copies kept save in a phone, computer and email account.

Statistical Analysis:
Data was analysed using SPSS version 26 for windows (SPSS Inc, Chicago USA) and also Excel 2013. Descriptive summary of the data was presented on frequency tables using percentages and also on graphs using Excel. Descriptive statistics was mostly used to describe outcome variables by frequencies and percentages. Chi-square test (χ^2) was used to compare the perceived life style characteristics within each component such as intake of alcohol, having a sexual partner. The major indicators estimated were compliance (did not miss any dose for the past two weeks). Binary logistic regression was used to identify the variables which were candidates for the multivariate analysis by considering p<0.2 as a cut-off point. The multivariate analysis was used to identify factors associated with compliance. The scores of component of wellbeing (being bothered over the last two weeks) for each participant was presented as percentage scored by each component. Chi-square test was used to compare the relationship between variables (socio-demographic characteristics, respondents' perceptions and habit) and the well-being of HIV positive adolescents and young adults.

Ethical Considerations:
An ethical approval was obtained from the Faculty of Health Sciences Institutional Review Board of the University of Buea. Also, an administrative authorization was obtained from the Regional Delegation of Public Health for the South West Region. Other administrative authorisation was obtained from the Buea Regional Hospital. All participants were informed of the study goals, procedure, potential harm and benefits of the study. A signed assent form was obtained from adolescents and their parents/guardians. An informed consent was obtained from young adults before the administration of the questionnaire. All consented participants were immediately enrolled in the study. Also, confidentiality of respondent's information was fully assured.

RESULTS

Table 1: Socio-demographic characteristics of respondents

Variables	Categories	Frequency	Percentage
Age	10-19	72	48.0
	20-30	78	52.0
	Total	**150**	**100.0**
Gender	Male	42	28.0
	Female	108	72.0
	Total	**150**	**100.0**
Level of education	Primary education	21	14.0
	Secondary education	67	44.7
	University/Professional education	62	41.3
	Total	**150**	**100.0**
Marital status	Single	146	97.3
	Married	4	2.7
	Total	**150**	**100.0**
Religion	Christian	142	94.7
	Muslim	8	5.3
	Total	**150**	**100.0**
Schooling or learning a trade	Schooling	118	78.7
	Learning a trade	32	21.3
	Total	**150**	**100.0**
Address	Buea	108	72.0
	Tiko	16	10.7
	Limbe	12	8.0
	Others	14	9.3
	Total	**150**	**100.0**
Duration from house to clinic by vehicle	10 minutes	4	2.7
	20 minutes	35	23.3
	30 minutes	53	35.3
	>30 minutes	58	38.7
	Total	**150**	**100.0**

The majority of participants (52.0%) were between the ages of 20-30 years. With respect to gender, most of the respondents were female (72.0%) as compared to males (28.0%) (Table 1). Also, most of participants were at the secondary level of education (44.7%) as compared to the primary (14.0%) and university (41.3%) levels of education. For marital status, 97.3% and 2.7% of the respondents were single and married respectively. About 94.7% of the participants were christians while 5.3% of the participants were muslims. Majority of participants were schooling (78.7%) while a minority of them were learning a trade (21.3%). The greater proportion of the respondents were from Buea (72.0%), while the rest were from Tiko (10.7%), Limbe (8.0%) and other areas (9.3%). The highest duration required by participants to travel from their homes to the hospital by vehicle was reported to be greater than 30 minutes (38.7%).

Table 2: Lifestyle perception of respondents

Variables	Category	Frequency	Percentage	P-value
Intake of alcohol	Yes	44	29.3	
	No	106	70.7	<0.001
	Total	**150**	**100.0**	
Having a sexual partner	Yes	49	32.7	
	No	101	67.3	<0.001
	Total	**150**	**100.0**	
Partner's awareness of their HIV status	Yes	14	28.6	
	No	35	71.4	0.003
	Total	**49**	**100.0**	

Have as opinion sharing personal belongings with family members	Yes	7	4.7	<0.001
	No	143	95.3	
	Total	**150**	**100.0**	
Envisaged what their life expectancy can be (Years)	>25 years	2	2.7	<0.001
	>30 but <50	8	5.3	
	>50 but <60	16	10.7	
	>60 but <70	48	32.0	
	>70 but <80	41	27.3	
	>80	33	22.0	
	Total	**150**	**100.0**	
Assumed it is appropriate to donate blood	Yes	5	3.4	<0.001
	No	137	91.3	
	I don't know	8	5.3	
	Total	**150**	**100.0**	
Life style restrictions	Yes	25	16.7	<0.001
	No	125	83.3	
	Total	**150**	**100.0**	
Lifestyle restrictions; no unprotected sex (9), no sharing of blades, needles and other personal belongings (7), avoid blood donation (4), no alcohol (3), avoid bad friends (2)				

*P-value computed from chi square test.

A greater percentage (70.7%) of the participants reported that they take alcohol which was significantly higher (p<0.001) than those that reported not taking alcohol (29.3%) Most participants (67.3) did not have sexual partners and they were significantly (p<0.001) greater in number than those who had sexual partners (32.7). Out of those having sexual partners (n=49), only 28.6% reported that their partners were aware of their HIV status. Also, majority (95.3%) would not share personal body items with family members. A smaller proportion of respondents (27.3%) envisaged a life expectancy of >70 but <80 years. Those who did not have any lifestyle restriction (83.3%) were significantly more than (p<0.001) those with lifestyle.
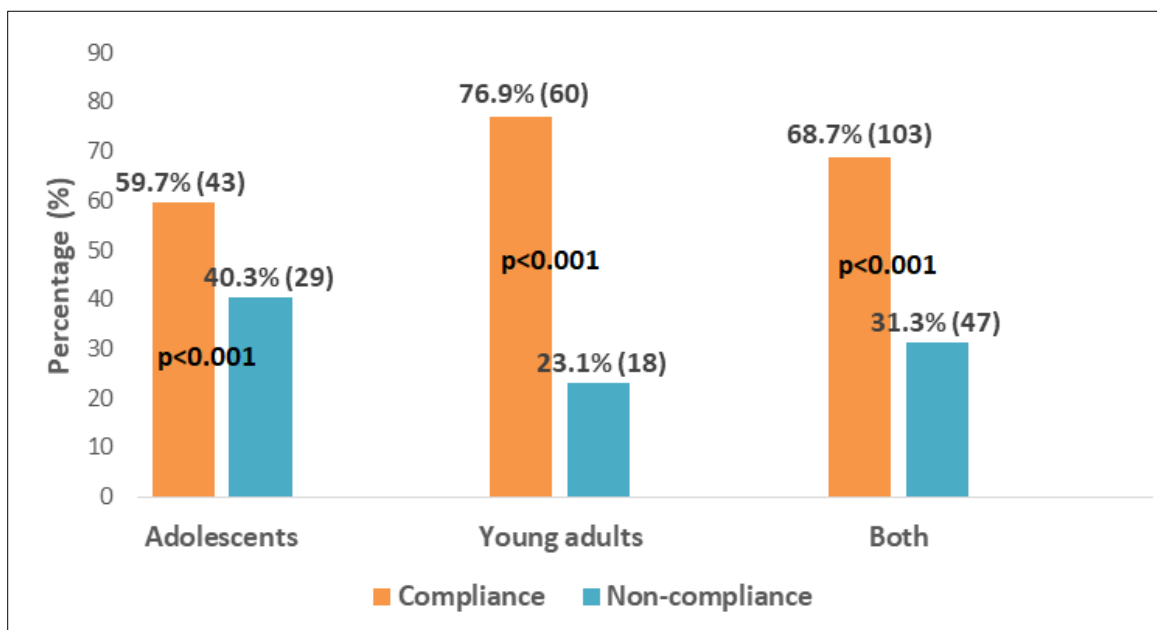

Figure 1: Compliance and non-compliance to HIV treatment regimen among adolescents and young adults

Out of the 150 participants, 103 (68.7%) were observed to comply to ART treatment as compared to a non-compliance rate of 31.3% with a significant difference (p<0.001) between the two reported that their partners were aware of their HIV status. Also, compliance in young adults (76.9%) was significantly greater (p<0.001) than that in adolescents (59.7%).

Table 3: Multivariate analysis of ART compliance among the respondents

Variables	Category	Compliance		OR (95% CI)	P-value
		Yes N (%)	No N (%)		
Age	10-19	43 (41.7)	29 (61.7)	2.20 (0.89-5.41)	0.086
	20-30	60 (58.3)	18 (38.3)	-	-
Duration from house to clinic by vehicle	10 minutes	2 (1.9)	2 (4.3)	0.33 (0.02-4.96)	0.426
	20 minutes	27 (26.2)	8 (17.0)	0.68 (0.23-2.04)	0.489
	30 minutes	37 (35.9)	16 (34.0)	0.68 (0.27—1.68)	0.400
	>30 minutes	37 (35.9)	21 (44.7)	-	-
Duration on ART (years)	14-20	10 (9.7)	8 (17.0)	2.48 (0.66-9.24)	0.178
	7-13	55 (53.4)	27 (57.4)	1.20 (0.45-3.22)	0.713
	≤6	38 (36.9)	12 (25.5)	-	-
Envisaged sharing items with family members	Yes	3 (2.9)	4 (8.5)	7.38 (0.68-80.17)	0.101
	No	10 (97.1)	43 (91.5)	-	-
Difficulty in taking medication	Yes	4 (3.9)	4 (8.5)	1.38 (0.16-11.70)	0.769
	No	59 (57.3)	18 (38.3)	0.65 (0.28-1.51)	0.314
	Sometimes	40 (38.8)	25 (53.2)	-	-
Not taking medication when feeling better	Yes	2 (1.9)	2 (4.3)	10.22 (0.52-200.23)	0.126
	No	92 (89.3)	36 (76.6)	1.28 (0.32-5.12)	0.729
	Sometimes	9 (8.7)	9 (19.1)	-	-
Not taking medication when you feel depressed	Yes	8 (7.8)	1 (2.1)	0.02 (0.001-0.39)	0.010
	No	89 (86.4)	35 (74.5)	0.20 (0.05-0.74)	0.016
	Sometimes	6 (5.8)	11 (23.4)	-	-
Eating well	Yes	79 (76.7)	38 (80.9)	2.05 (0.61-6.92)	0.248
	No	4 (3.9)	4 (8.5)	5.50 (0.83-36.38)	0.077
	Sometimes	20 (19.4)	5 (10.6)	-	-

In multivariate analysis, taking medication when feeling depressed was significantly (OR 0.20, 95% CI: 0.05-0.74, p=0.016) associated to compliance with treatment than sometimes not taking medications when feeling depressed (Table 5). Moreover, stopping to take medication when feeling depressed was significantly (OR 0.02, 95% CI: 0.001-0.39, p=0.010) associated with compliance compared to sometimes not taking medication when feeling depressed.

DISCUSSION

Out of the 150 participants, 103 (68.7%) were observed to comply with ART treatment as compared to a non-compliance rate of 31.3% (47 participants). The rate of compliance in young adults was 76.9% while that in adolescents was 59.7%. The compliance in adolescents (59.7%) is in line with that obtained (59.6%) among HIV-Infected adolescents at the Paediatric Department of Yopougon University Hospital in Ivory Coast (Eboua *et al*., 2018). It is however below that obtained (83%) among HIV-positive adolescents on ART in the North West and South West regions of Cameroon (Bongfen *et al*., 2020). Compliance in young adults (76.9%) corroborates with a compliance rate of 79.2% reported in a previous study carried at the University of Nigeria Teaching Hospital Enugu (Onyekwere, 2013). Also, the overall compliance (68.7%) in the current study is similar to that of 67% reported among youths (15-24 years) in selected health facilities in Nyeri country, Kenya (Irakoze, 2021) but is below that of a previous study (82%) in Haiti by Dorcelus *et al*., (2021). It is also far below the average compliance rate (94.84%) observed in among adults (≥18 years) at a Tertiary Care Hospital in North Karnataka (Hasabi *et al*., 2016). The low level in the current study could be attributed to limited sample size (n=150) of recruited study participants. The level of non-compliance observed in the present study in adolescents (40.3%) and in young adults (23.1%) are respectively are similar to results obtained in Ivory Coast (40.4%) by Eboua *et al*., (2018) and in Cameroon (22.5%) by Perfua-Yone *et al*., (2013). They are however above the rate (5.16%) reported by a previous study (Hasabi *et al*., 2016).

This study showed that taking medication when feeling depressed was significantly associated to compliance with treatment than sometimes not taking medications when feeling depressed. Also, stopping to take medication when feeling depressed was significantly associated with compliance compared to sometimes not taking medication when feeling depressed. No previous study has demonstrated such outcomes. However, previous studies demonstrated other factors to be associated with compliance. These factors were female gender,

age greater than 49 years, higher levels of education, positive perceptions of treatment, high motivation, using reminder methods, satisfaction with information provided by physician, higher CD4 count at initiation of ART, and being transferred-in from another clinic, from a systematic review in Cameroon (Mbuagbaw *et al*., 2012). In addition, other factors associated with compliance were experiencing health improvement and receiving social support from a study in Nigeria (Onyekwere, 2013). Moreover, other factors were ages 35–44 years, having moderate monthly income, no history of opportunistic infection and having good family support in Eastern Ethiopia (Letta *et al*., 2015) and experiencing side effects and internalized stigma in the North West and South West regions of Cameroon (Bongfen *et al*., 2020).

However, a previous study conducted at the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria, revealed the age group 20-29 years to be associated with non-compliance (Okoronkwo *et al*., 2013). Moreover, another outcome obtained in a study among hospitalized patients in North West Ethiopia identified the age group 31-45 years as a factor associated with non-compliance (Tsega *et al*., 2015). However, those do not stop taking their medication when they feel depressed will not full comply as they may fluctuate in taking their doses in trying to cope in the depression phase and as such may not fully adhere to ART treatment.

CONCLUSIONS

An overall compliance (68.7%) was observed against a non-compliance rate of 31.3%. The factors associated with compliance to ART treatment were; taking medication when feeling depressed significantly (p=0.016) associated to compliance with treatment than sometimes not taking medications when feeling depressed. Moreover, stopping to take medication when feeling depressed significantly (p=0.010) associated with compliance compared to sometimes not taking medication when feeling depressed.

RECOMMENDATIONS

Counsellors should educate HIV positive adolescents and young adults how to handle depression phase in their life in order not to interfere in their compliance with ART.

The government should provide enabling environment to adolescents and young adults ART and Health providers should educate parents as well as adolescents on the need to eat well in order to increase compliance.

The community should provide the necessary support to young people living with HIV by reducing stigmatization and discrimination.

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