

Attitudes of People Living with HIV/AIDS at Babcock University Teaching Hospital Regarding Factors Affecting Adherence to Antiretroviral Regimens

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Annotation: Background: Antiretroviral Therapy (ART) adherence is a critical factor in managing HIV/AIDS, significantly impacting patient health outcomes and the broader goal of reducing HIV transmission. Despite the availability of ART, adherence remains a challenge due to various patient-level and health institution-level factors. This study assesses the attitudes of People Living with HIV/AIDS (PLWHA) at Babcock University Teaching Hospital (BUTH), Nigeria, towards factors affecting adherence to ART regimens.

Objectives: The primary aim is to

evaluate the attitudes of PLWHA at BUTH regarding factors influencing adherence to ART. The specific objectives include: 1) Assessing the attitude towards ART among PLWHA at BUTH, 2) Identifying patient-level factors contributing to ART adherence, and 3) Evaluating health institution-level factors affecting ART adherence.

Methods: This cross-sectional descriptive study was conducted at BUTH, Babcock University Teaching Hospital is located in Ilishan Remo, Ogun State, Nigeria. The hospital serves a diverse population, including men, women, and children from various parts of the country. Data were collected from 105 respondents attending the HIV clinic, where ART is provided free of charge. A structured questionnaire was used to gather information on demographic characteristics, knowledge, attitudes, and factors influencing ART adherence. Data were analyzed using descriptive and inferential statistics, with chi-square tests employed to determine associations between variables at a significance level of $p < 0.05$.

Results: The majority of respondents were aged 31-40 years (38%) and predominantly female (58.3%). A significant proportion of respondents (76.2%) were married, and most identified as Christians (80.9%). Educational attainment was high, with 76.2% having tertiary education. Most respondents (78%) were employed, and the majority fell within the middle-income range (50,001-100,000 Naira monthly).

Awareness of ART benefits was generally high, with 57.1% recognizing that ART can extend life expectancy and 76.2% understanding its role in suppressing viral load. However, gaps in knowledge were evident, with 49% unable to recall the meaning of ART and 54.6% unaware that forgetfulness is a key factor in non-adherence. The negative attitude of healthcare workers was identified as a significant barrier to adherence, recognized by 28.6% of respondents.

Statistical analysis revealed a significant relationship between the perception that ART suppresses viral load and the belief that income,

education, and literacy affect adherence (chi-square = 25.610, $p = 0.000$). Additionally, a significant association was found between recognizing the benefits of ART adherence and the impact of healthcare worker attitudes (chi-square = 21.115, $p = 0.002$).

Conclusion: The study highlights that while there is considerable awareness of the benefits of ART among PLWHA at BUTH, significant barriers to adherence persist, particularly related to socioeconomic factors, healthcare worker attitudes, and knowledge gaps. Addressing these issues through targeted interventions is essential for improving ART adherence and achieving better health outcomes.

Recommendations: The study recommends implementing comprehensive educational programs to close knowledge gaps, addressing socioeconomic barriers through support systems, enhancing healthcare worker training to foster positive patient interactions, and simplifying treatment regimens to reduce the complexity of adherence. These measures are crucial for improving adherence rates among PLWHA and achieving long-term HIV management goals.

Keywords: Antiretroviral Therapy (ART), HIV/AIDS, adherence, People Living with HIV/AIDS (PLWHA), Babcock University Teaching Hospital (BUTH), Nigeria.

Background to the study

HIV/AIDS remains a significant public health challenge globally, with millions of people living with the disease. Effective management of HIV/AIDS relies heavily on adherence to Antiretroviral Therapy (ART), which can suppress the viral load, improve immune function, and reduce the risk of transmission. However, maintaining high levels of adherence to ART is a considerable challenge, influenced by various factors including individual attitudes, socioeconomic conditions, and the healthcare environment (Adejumo et al., 2021).

Adherence to ART is crucial for achieving viral suppression and improving the quality of life for people living with HIV/AIDS (PLWHA). Studies have shown that adherence rates of over 95% are necessary to maintain viral suppression and prevent the development of drug resistance (Nachega et al., 2014). Despite the availability of free ART in many settings, including Nigeria,

adherence remains suboptimal, with various studies reporting rates ranging from 30% to 70% (Onoya et al., 2021).

In Nigeria, the burden of HIV/AIDS is significant, with an estimated 1.8 million people living with the disease as of 2020 (UNAIDS, 2020). The country has made substantial progress in scaling up ART services, but challenges remain, particularly in ensuring that patients adhere to their prescribed regimens. Factors such as stigma, discrimination, lack of social support, side effects of medication, and negative attitudes from healthcare providers have been identified as major barriers to adherence (Erah & Arute, 2008).

Babcock University Teaching Hospital (BUTH) in Ogun State, Nigeria, provides ART services to a diverse population, including men, women, and children. The hospital is part of the national effort to control HIV/AIDS through the provision of free ART. However, like other parts of the country, adherence to ART at BUTH is influenced by multiple factors. Understanding the attitudes of PLWHA towards these factors is critical for developing effective strategies to improve adherence and, consequently, health outcomes.

Previous studies have highlighted the importance of patient attitudes in adherence to ART. Positive attitudes, including a strong belief in the efficacy of ART and a commitment to taking medication as prescribed, are associated with higher adherence rates (Shigdel et al., 2014). Conversely, negative attitudes, such as fear of side effects or skepticism about the benefits of ART, can lead to poor adherence. Additionally, the role of healthcare providers is crucial, as their attitudes and behaviors can either support or hinder patient adherence (Nabukeera-Barungi et al., 2015).

This study aims to explore the attitudes of PLWHA at BUTH regarding factors affecting adherence to ART. By identifying the key determinants of adherence within this population, the study seeks to contribute to the development of targeted interventions that can enhance adherence rates and improve the overall management of HIV/AIDS in this setting.

Objective of the study

The main objectives of this study is to assess the attitudes of People Living with HIV/AIDS at Babcock University Teaching Hospital Regarding Factors Affecting Adherence to Antiretroviral Regimens.

Specific objectives are to:

1. Assess the attitude towards antiretroviral regimen among people living with HIV/AIDS attending Babcock University Teaching Hospital.
2. Assess the patient-level factors contributing to adherence with antiretroviral regimen of people living with HIV/AIDS attending Babcock University Teaching Hospital.
3. Assess the health institution-level factors contributing to adherence with antiretroviral regimen of people living with HIV/AIDS attending Babcock University Teaching Hospital.

MATERIALS AND METHOD

STUDY DESIGN

This study was a cross-sectional descriptive study designed to assess the attitudes of people living with HIV/AIDS at Babcock University Teaching Hospital regarding factors affecting adherence to antiretroviral regimens. Babcock University Teaching Hospital, located in Ilishan Remo, Ogun State, is situated equidistant between Ibadan and Lagos. Affiliated with Babcock University, the hospital has a bed capacity of 181 and employs 209 nurses across approximately 20 departments, including medicine, surgery, pediatrics, obstetrics, and gynecology.

Babcock University Teaching Hospital, located in Ilishan, Ogun State, has been privately owned by the Seventh-day Adventist Church since 1959. It is situated in Ilishan Remo, a town within the Irepodun district of the Ikenne Local Government Area in southwestern Nigeria. The hospital's

HIV clinic serves an average of 62 patients—both new and returning, including adults and children—each week. Antiretroviral (ARV) drugs are dispensed free of charge on a monthly basis to registered HIV-infected patients, including men, pregnant and non-pregnant women, and children from various parts of Nigeria. The target population for this study comprises people living with HIV/AIDS who attend Babcock University Teaching Hospital. **DATA ANALYSIS**

Data collection was entered, coded, and analyzed using the Statistical Package for the Social Sciences (SPSS) software. Both descriptive and inferential statistics were utilized in the analysis. Descriptive statistics were presented in the form of frequency and percentage tables. In addition, inferential statistics, such as the chi-square test, were applied to evaluate the statistical significance of associations between independent and dependent variables, with a p-value of less than 0.05 being considered statistically significant.

ETHICAL CONSIDERATIONS

Permission to conduct the study was obtained from the Babcock University Health Research Committee (BUHREC). Participants were provided with both verbal and written explanations about the study, including its purpose and the potential benefits of their participation. They were assured that all information collected would remain confidential. To ensure anonymity in the quantitative data, participants were instructed not to include their names or any identifying marks on the survey forms. **RESULTS**

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 1

Age	Frequency	Percentage
21-30	34	31.5
31-40	41	38.0
41-50	23	21.3
51-60	7	9.3
Total	105	100.0

Out of 105 respondents, the largest group is aged 31-40 years (38%), followed by 21-30 years (31.5%). Fewer respondents are aged 41-50 years (21.3%), and the smallest group is aged 51-60 years (9.3%).

Table 2

Gender	Frequency	Percentage
Male	43	39.8
Female	62	58.3
Total	105	100.0

The gender distribution data reveals a higher proportion of female respondents compared to males. Specifically, 58.3% of the sample are female, while 39.8% are male. This indicates that females are more represented in this study, which might reflect higher participation rates among women or a greater relevance of the study's focus to this gender.

Table 3

Marital status	Frequency	Percentage
Married	80	76.2
Widowed	10	9.5
Divorced	15	14.3
Total	105	100.0

The marital status distribution data shows that out of 105 respondents, 76.2% are married, 9.5% are widowed, and 14.3% are divorced.

Table 4

Religion	Frequency	Percentage
Christain	85	80.9
Islam	18	17.1
Traditional	2	1.9
Total	120	100.0

Out of 120 respondents, 80.9% are Christian, 17.1% are Muslim, and 1.9% follow traditional religions.

Table 5

Level of education	Frequency	Percentage
Primary	5	4.8
Secondary	20	19.1
Tertiary	80	76.2
Total	105	100.0

Out of 105 respondents, 4.8% have a primary education, 19.1% have a secondary education, and 76.2% have a tertiary education.

Table 6

Ethnic group	Frequency	Percentage
Yoruba	90	87.5
Igbo	15	9.4
Hausa	5	4.8
Total	105	100.0

The data on ethnic group distribution reveals that Out of 105 respondents, 87.5% are Yoruba, 9.4% are Igbo, and 4.8% are Hausa.

Table 7

Average monthly income	Frequency	Percentage
Above 10,000	11	10.5
10,001-50,000	10	9.5
50,001-100,000	82	78
Above 100,001	2	1.9
Total	105	100.0

The data on average monthly income shows a clear concentration in the middle-income range. Out of 105 respondents, 10.5% have an average monthly income above 10,000, 9.5% between 10,001 and 50,000, 78% between 50,001 and 100,000, and 1.9% above 100,001.

Table 8

Employment status	Frequency	Percentage
Employed	82	78
Unemployed	5	4.8
Student	18	17.1
Total	105	100.0

The employment status data reveals that out of 105 respondents, 78% are employed, 4.8% are unemployed, and 17.1% are students.

SECTION B: Respondent's Knowledge on Antiretroviral Therapy Regimen

Table 9

Do you know that ART regimen is used to suppress viral load of HIV/AID?	Frequency	Percentage
Yes, I do	51	47.2
No I don't	40	38.0
I cant recall	14	14.8
Total	105	100.0

Out of 105 respondents, 47.2% know that the ART regimen is used to suppress the viral load of HIV/AIDS, 38% do not, and 14.8% cannot recall.

Table 10

Do you know that ART regimen will help in enabling you to even live longer than you expect	Frequency	Percentage
Yes I do	60	57.1
No, I don't	14	13.3
I cant recall	31	29.5
Total	105	100.0

The data on the awareness of the benefits of ART (Antiretroviral Therapy) in extending life expectancy among HIV/AIDS patients shows that Out of 105 respondents, 57.1% know that the ART regimen can help them live longer than expected, while 13.3% do not. Additionally, 29.5% cannot recall.

Table 11

Do you know that ART mean antiretroviral therapy	Frequency	Percentage
Yes I do	49	45.4
No, I do not	50	49.0
I cant recall	6	5.6
Total	105	100.0

The data on awareness of the meaning of ART (Antiretroviral Therapy) shows that out of 105 respondents, 45.4% know that ART stands for antiretroviral therapy, while 49% do not. Additionally, 5.6% cannot recall.

Table 12

Do you know that you can easily forget your ART regimen because they are indices for measuring ART	Frequency	Percentage
Yes, I do	26	23.1
No I don't	59	54.6
I cant recall	20	18.5
Total	105	3.7

The data reveals varying levels of awareness among respondents regarding the possibility of forgetting their ART regimen because they are indices for measuring ART adherence. Out of 105 respondents, 23.1% know that they can easily forget their ART regimen because it involves indices for measuring ART, while 54.6% do not. Additionally, 18.5% cannot recall.

Table 13

Do you know that adherence to ART regimen enhance the most valuable HIV management outcome	Frequency	Percentage
Yes I do	52	48.1
No I do not	10	9.3
I don't know	34	34.3
I can't recall	9	8.3
Total	108	100

Out of 108 respondents, 48.1% know that adherence to the ART regimen enhances the most valuable HIV management outcome, while 9.3% do not. Additionally, 34.3% do not know, and 8.3% cannot recall.

Table 14

Do you know that adherence is higher among respondent who have been on ART regimen for longer period	Frequency	Percentage
Yes I do	68	64.7
No I do not	25	23.8
I can't recall	12	11.4
Total	105	100.0

Out of 105 respondents, 64.7% know that adherence is higher among those who have been on ART for a longer period, while 23.8% do not. Additionally, 11.4% cannot recall.

Table 15

Do you know that ART side effect can result in respondent's non-adherence?	Frequency	Percentage
Yes,I do	25	23.8
No,I dont	75	71.4
I cant recall	5	4.8
Total	105	100.0

From table 13 above, out of 105 respondents, 23.8% know that ART side effects can result in non-adherence, while 71.4% do not. Additionally, 4.8% cannot recall.

Table 16

Do you know that negative attitude of health care workers can be a barrier to adherence to ART regimen	Frequency	Percentage
Yes I do	30	28.6
No I do not	72	68.6
I cant recall	3	2.9
Total	105	100.0

Out of 105 respondents, 28.6% know that a negative attitude of healthcare workers can be a barrier

to adherence to the ART regimen, while 68.6% do not. Additionally, 2.9% cannot recall.

Table 17

Do you know that use of illicit drug and alcohol consumption has significantly resulted into non-adherence of respondents to ART regimen	Frequency	Percentage
Yes I do	90	85.7
No I do not	10	9.5
I can't recall	5	4.8
Total	105	100.0

From table 17 above, out of 105 respondents, 85.7% know that the use of illicit drugs and alcohol consumption has significantly resulted in non-adherence to the ART regimen, while 9.5% do not. Additionally, 4.8% cannot recall.

SECTION C: Respondent's Perception on Antiretroviral Therapy regimen

Table 18

Do you perceive that adherence to ART regimen would suppress the viral load in your blood	Frequency	Percentage
Yes,I do	80	76.2
No,I do not	20	19.0
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 76.2% believe that adherence to the ART regimen would suppress the viral load in their blood, while 19% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 19

Do you perceive that adherence to ART regimen can only be possible if you have the full support of the significant others	Frequency	Percentage
Yes,I do	62	57.1
No,I do not	38	38.1
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

The table above showed that more than half of the respondents 62(57.1%) stated that they perceive that adherence to ART regimen can only be possible if you have the full support of the significant others,38(38.1%) reported that they do not perceive that adherence to ART regimen can only be possible if you have the full support of the significant others while 3(2.9%) stated that they will inquire and the remaining 2(1.9%) couldn't remember

Table 20

Do you perceived that regular adherence to ART regimen would disallow the spread of HIV to your contacts	Frequency	Percentage
Yes,I do	59	56.2
No,I do not	45	42.9
I will inquire	1	0.95
Total	105	100.0

Findings from table above showed that Out of 105 respondents, 56.2% believe that regular adherence to the ART regimen would prevent the spread of HIV to their contacts, while 42.9% do not. Additionally, 0.95% would inquire further.

Table 21

Do you perceive that regular adherence to ART regimen would enable you to maintain your health status	Frequency	Percentage
Yes,I do	80	76.2
No,I do not	20	19.0
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 76.2% believe that regular adherence to the ART regimen would enable them to maintain their health status, while 19% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 23

Do you perceive that adherence to ART regimen would assist you in retaining your job status	Frequency	Percentage
Yes, I do	70	66.7
No, I do not	30	28.6
I will inquire	3	2.9
I can't remember	2	1.9
Total	105	100.0

From the table above, out of 105 respondents, 66.7% believe that adherence to the ART regimen would assist them in retaining their job status, while 28.6% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 24

Do you perceive that adherence to ART regimen would enable you enjoying the fruit of your labour	Frequency	Percentage
Yes,I do	62	57.1
No,I do not	38	38.1
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 57.1% believe that adherence to the ART regimen would enable them to enjoy the fruit of their labor, while 38.1% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 25

Do you perceive that adherence to ART regimen would remove HIV/AIDS stigma in your life because regular intake of your drug would disallow the community from knowing you are retroviral positive	Frequency	Percentage
Yes,I do	50	47.6
No,I do not	52	49.5
I will inquire	2	1.9
I cant remember	1	0.95
Total	105	100.0

Result from the table above revealed that out of 105 respondents, 47.6% believe that adherence to the ART regimen would remove HIV/AIDS stigma by preventing the community from knowing their retroviral status, while 49.5% do not. Additionally, 1.9% would inquire further, and 0.95% cannot remember.

Table 26

Do you perceive that adherence to ART regimen would reduce the incidence and prevalence of mortality and morbidity among PLWHA	Frequency	Percentage
Yes,I do	82	78.0
No,I do not	15	14.3
I will inquire	5	4.8
I cant remember	3	2.9
Total	105	100.0

Out of 105 respondents, 78% believe that adherence to the ART regimen would reduce the incidence and prevalence of mortality and morbidity among PLWHA, while 14.3% do not. Additionally, 4.8% would inquire further, and 2.9% cannot remember.

SECTION D: Determinants of respondent's adherence to ART regimen

Table 27: Patients determinants

Do you think your income, education and literacy can affect your adherence to ART regimen	Frequency	Percentage
Yes,I do	70	66.7
No,I do not	30	28.6
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 66.7% believe that income, education, and literacy affect adherence to the ART regimen, while 28.6% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 28: Patients determinants

Do you think that lack of appropriate health insurance scheme would affect your to adherence to ART regimen	Frequency	Percentage
Yes,I do	80	76.2
No,I do not	20	19
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 76.2% believe that a lack of appropriate health insurance affects adherence to the ART regimen, while 19% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 29: Socio demographic determinants

Do you think that your decision and perception over treatment outcome can affect your adherence to ART regimen	Frequency	Percentage
Yes,I do	62	57.1
No,I do not	38	38.1
I will inquire	5	4.8
Total	105	100.0

Out of 105 respondents, 57.1% believe that their decision and perception over treatment outcomes affect adherence to the ART regimen, while 38.1% do not. Additionally, 4.8% would inquire further.

Table 30: Psychological determinants

Do you think that forgetfulness can affect your adherence to ART regimen	Frequency	Percentage
Yes,I do	70	66.7
No,I do not	30	28.6
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 66.7% believe that forgetfulness affects adherence to the ART regimen, while 28.6% do not. Additionally, 2.9% would inquire further, and 1.9% cannot remember.

Table 31: Treatment determinants

Do you think that complexity of the ART regimen would affect your adherence to ART regimen	Frequency	Percentage
Yes,I do	62	57.1
No,I do not	38	38.1
I will inquire	3	2.9
I cant remember	2	1.9
Total	105	100.0

Out of 105 respondents, 57.1% believe that the complexity of the ART regimen affects adherence, while 38.1% do not think it has an impact. A small percentage, 2.9%, would inquire further, and 1.9% cannot remember.

Table 32

Knowledge score	Frequency	Percentage
0-5, poor knowledge	5	4.8
6-10, good knowledge	100	95.2
Total	105	100.0

A higher number of the respondents 95.2% of the respondents has good knowledge of adherence to antiretroviral regimen while only 4.8% of them has good knowledge of adherence to antiretroviral regimen

SECTION D: TESTING OF RESEARCH HYPOTHESIS

First hypothesis: There is no significant relationship between the attitude and perception towards adherence and the patient-level factors contributing to adherence of antiretroviral regimen.

Table 33

Do you perceive that adherence to ART regimen would suppress the viral load in your blood	Do you think your income, education and literacy can affect your adherence to ART regimen							
	Yes, I do	No, I dont	I will inquire	I cant recall	Total	Chi square	Df	P-value
Yes, I do	45(43.9 %)	18(31.6%)	14(24.6%)	0(0.0%)	77(100 %)	25.610	2	0.000
No,I don't	15(46.4. 0%)	9(54%)	0(0.0%)	0(0.0%)	24(100 %)			
I will inquire	4(100%)	0(0.0%)	0.(0.0%)	0.(0.0%)	4(100 %)			
Total	64(84.7 %)	27(84%)	14(24.6%)	0(0.0%)	105(10 0%)			

The data shows a significant relationship between the perception that adherence to ART regimen would suppress the viral load and the belief that income, education, and literacy can affect adherence, with a chi-square value of 25.610 and a p-value of 0.000. Among those who perceive adherence would suppress viral load, 43.9% also believe that their income, education, and literacy affect adherence, while 24.6% will inquire further. For those who do not perceive the suppression effect of adherence, 46.4% believe these socioeconomic factors influence adherence. Notably, all respondents who will inquire further about adherence also believe that income, education, and literacy can affect adherence. This indicates a strong association between understanding the benefits of ART adherence and recognizing the impact of socioeconomic factors on maintaining adherence

.Second hypothesis: There is no significant relationship between the attitude towards adherence and the health institution-level factors contributing to adherence of antiretroviral regimen

Table 34

Do you perceive that adherence to ART regimen would suppress the viral load in your blood	Do you know that negative attitude of health care workers can be a barrier to adherence to ART regimen						
	Yes I do	No, I don't	I can't recall	Total	Chi square	Df	P-value
Yes I do	20(85.1%)	1(61.9%)	1(4.8%)	21(100.0%)	21.115	9	0.002
No I don't	16(34.0%)	15(31.9%)	14(29.8%)	47(100.0%)			
I will inquire	11(28.9%)	11(28.9%)	8(21.1%)	35(100.0%)			
I cant recall	0(0.00%)	2(38.0%)	0(0.00%)	2(100.0%)			
Total	34(31.5%)	41(100.0%)	23(21.3%)	105(100.0%)			

The data indicates a significant relationship between the perception of adherence to ART regimen suppressing viral load and the recognition that the negative attitude of healthcare workers can be a barrier to adherence, with a chi-square value of 21.115 and a p-value of 0.002. Among those who believe adherence to ART regimen would suppress viral load, 85.1% also recognize that a negative attitude of healthcare workers can be a barrier, while only 4.8% cannot recall. Conversely, among those who do not believe in the suppression effect of adherence, 34.0% acknowledge the barrier posed by healthcare workers' attitudes, with 29.8% unable to recall. Those who are willing to inquire further showed similar levels of awareness (28.9%) and uncertainty (21.1%). Only a small fraction of respondents could not recall their stance on either question. This suggests a strong link between understanding the benefits of ART adherence and recognizing the importance of supportive healthcare worker attitudes in maintaining adherence.

Discussion of Findings

The study reveals important insights into the demographic characteristics, awareness, and perceptions of respondents regarding adherence to Antiretroviral Therapy (ART). The age distribution indicates that most respondents are in their prime working years, with 38% aged 31-40 years and 31.5% aged 21-30 years. This demographic profile suggests that the participants may have heightened concerns about maintaining their health and productivity, particularly in relation to their employment and income stability. The higher proportion of female respondents (58.3%) suggests that women might be more engaged in health-related studies, possibly due to greater health consciousness or the relevance of the study's focus to their lives.

Religious and educational backgrounds also play a significant role in shaping perceptions and behaviors regarding ART. With 80.9% of respondents identifying as Christian and 76.2% having tertiary education, the sample appears to be relatively well-educated and possibly influenced by the support systems within religious communities. This background may contribute to a better understanding of ART and its importance, although the data also show that gaps in awareness persist.

Income and employment status are critical factors influencing adherence to ART. The concentration of respondents in the middle-income range, with 78% earning between 50,001 and

100,000, highlights the financial stability of the group. Most respondents are employed (78%), further emphasizing the link between economic stability and health adherence. This is consistent with the finding that a majority believe adherence to ART would help maintain their job status and overall health.

Awareness of ART's benefits is widespread among respondents, with many recognizing its role in suppressing the viral load and extending life expectancy. However, there is still a significant portion of respondents who lack this knowledge or cannot recall it, which could negatively impact adherence. This indicates a need for enhanced education and awareness programs to close these knowledge gaps.

The perception of ART's effectiveness in improving health outcomes is strong, with most respondents believing that adherence can suppress the viral load, prevent HIV transmission, and maintain their health. Despite this, barriers such as the negative attitude of healthcare workers and the side effects of ART are identified as significant challenges. These findings suggest that while there is a general understanding of ART's benefits, external factors like healthcare worker attitudes and treatment side effects may hinder adherence.

Socioeconomic factors are also closely linked to adherence, with a strong association found between understanding the benefits of ART and recognizing the impact of income, education, and literacy on adherence. Respondents who are aware of ART's benefits are more likely to acknowledge these socioeconomic barriers, highlighting the need for targeted interventions to address these challenges.

The negative attitude of healthcare workers emerges as a significant barrier to ART adherence. The study suggests that supportive healthcare environments are crucial for ensuring adherence, pointing to the need for better training and sensitization of healthcare workers to foster positive patient interactions. The recognition of side effects as a barrier to adherence further underscores the importance of addressing the challenges patients face in managing their treatment.

In conclusion, the study finds that while there is a high level of awareness regarding the benefits of ART among respondents, significant gaps in understanding and adherence remain. Socioeconomic factors, healthcare worker attitudes, and perceived side effects of ART are identified as key barriers to adherence. The strong association between recognizing the benefits of ART and acknowledging these barriers indicates that targeted interventions are needed to improve adherence rates.

Based on these findings, it is recommended to implement educational programs to increase awareness of ART, particularly among groups with lower levels of knowledge. Addressing socioeconomic barriers, enhancing healthcare worker training, and strengthening support systems are also critical steps. Furthermore, addressing side effects and simplifying treatment regimens where possible could significantly improve adherence to ART among people living with HIV/AIDS. These measures are crucial for achieving better health outcomes and reducing the transmission of HIV.

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