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Factors Associated with Adherence to Antiretroviral Therapy Among Women Living with HIV Attending Adeoyo Maternity Teaching Hospital Yemetu, Ibadan, Oyo State

[1]Elebiju Oluwatoyin Juliana, [2]Adedokun Opeyemi Hamirat and [3]Ogenma Ugushida ThankGod, Olowookere Isaac[4]

[1, 2, 3, 4] Faculty of Basic Medical Sciences, Department of Public Health, Adeleke University Ede, Osun State Nigeria.
Email address: elebiju2008@gmail.com, adedokunhamirat55@gmail.com, ugushioge@gmail.com, isaacolowookere1@gmail.com

ABSTRACT

Background: Adherence to antiretroviral therapy (ART) is essential for achieving viral suppression, reducing HIV-related morbidity and mortality, and preventing transmission. However, adherence remains a significant challenge, particularly among women in resource-limited settings, where various socio-demographic, psychological, and healthcare-related factors influence treatment uptake and retention. However, early therapy beginning, continuity of care, and good treatment adherence are crucial for the continuing success of ART.

Objective: This study examines the factors associated with adherence to ART among women living with HIV attending Adeoyo Maternity Teaching Hospital, Yemetu, Ibadan, Nigeria.

Methods: A descriptive cross-sectional study design was employed, enrolling 264 HIV-positive women aged 15–49 years through purposive sampling. Data were collected using a structured questionnaire assessing the predisposing, reinforcing and enabling factors of women living with HIV towards adherence to ART. Quantitative data analysis was conducted using SPSS version 25, with Pearson's correlation and multiple regression analysis employed to determine associations between predictor variables.

Results: The findings indicate that 83.5% of respondents exhibited good adherence to ART, while 16.5% demonstrated suboptimal adherence. The study also highlighted that the respondents had a good level of reinforcing factors of which family members and spouses were of great influence as regards adherence. Enabling factors among the respondents was also high. Significant correlations were observed between predisposing and reinforcing factors ($r = 0.515$, $p < 0.001$), reinforcing and enabling factors ($r = 0.412$, $p < 0.001$), and predisposing and enabling factors ($r = 0.393$, $p < 0.001$).

Conclusion: The study highlights the multifaceted nature of ART adherence, emphasizing the interplay between predisposing, enabling and reinforcing factors. Addressing stigma, strengthening psychosocial support networks, and enhancing healthcare service delivery are critical for improving adherence rates. Targeted interventions and policy measures are recommended to promote sustained ART adherence and improve health outcomes among women living with HIV.

Keywords: HIV/AIDS, Antiretroviral therapy, Adherence, Predisposing, Enabling, Reinforcing

1. Introduction

Human Immunodeficiency Virus (HIV) infection remains a major global public health concern, especially in sub-Saharan Africa, which accounts for a large proportion of the world's HIV burden. In Nigeria, HIV continues to be a leading cause of morbidity and mortality, with a significant number of women of reproductive age living with the virus. According to the World Health Organization (WHO, 2021; Shittu, et al, 2022), women are disproportionately affected by HIV, making up 54% of all individuals living with the virus in sub-Saharan Africa (Shittu, et al, 2022). HIV-related stigma, limited access to healthcare, and other socio-economic challenges exacerbate the situation, making effective management of the disease more difficult (Shittu, et al, 2022).

Antiretroviral Therapy (ART) has been proven to be highly effective in suppressing the HIV virus, improving immune function, and reducing the risk of opportunistic infections and transmission (Shittu, et al, 2022; Ruzagira et al., 2017). However, adherence to ART remains a major challenge, with non-adherence leading to poor health outcomes, including drug-resistant HIV strains, higher viral loads, and increased rates of morbidity and mortality (Heestermans et al., 2016). In Nigeria, particularly among women of reproductive age, ART adherence is critically important as it helps prevent the vertical transmission of HIV from mother to child, thus playing a key role in reducing new pediatric HIV cases (Hassana & Bashir, 2022).

Several factors influence ART adherence, including sociodemographic characteristics, psychological factors, and the availability of healthcare support. Studies have shown that factors such as age, education level, marital status, and employment status significantly affect ART adherence (Moosa et al., 2019; Anyaike et al., 2019). Psychological factors, including depression, anxiety, and HIV-related stigma, have also been identified as barriers to consistent ART use (Omosanya et al., 2014). Furthermore, the role of family support and healthcare system factors, such as accessibility and the quality of care, cannot be overstated, as these factors contribute to the motivation and ability of individuals to adhere to their treatment regimens (Nurfalah et al., 2019; Iacob et al., 2017).

In addition to these individual and systemic factors, the economic burden associated with ART can also be a deterrent, particularly in low-resource settings like Nigeria, where the cost of medication and transportation to healthcare facilities may limit access to regular ART (Kim et al., 2018). Moreover, stigma and discrimination related to HIV further complicate adherence to ART, as individuals may be reluctant to disclose their HIV status, seek medical care, or adhere to their treatment (Earnshaw et al., 2013). Similarly, greater extent of social support is linked to reduced degree of depression, anxiety, and the use of drug, which is linked to greater adherence to ART (McMahon, *et al*., 2019).

The high prevalence of HIV among women of reproductive age in Nigeria, along with the challenges associated with ART adherence, makes it essential to explore the factors influencing adherence behaviors. Understanding these factors is crucial for designing targeted interventions to improve ART adherence, reduce the transmission of HIV, and enhance the quality of life for women living with HIV in Nigeria.

1.2. Statement of the Problem

Human Immunodeficiency Virus (HIV) remains a global public health crisis, with over 35 million deaths attributed to the disease in the past three decades (WHO, 2018). In Nigeria, HIV/AIDS has been a persistent health challenge since the first cases were identified in 1985. Despite advancements in treatment and prevention, the incidence of new HIV infections continues to rise, with Nigeria contributing significantly to the global burden. Approximately 0.7% of adults aged 15–49 years are living with HIV worldwide, and women and girls account for 54% of the global HIV-positive population (WHO, 2021). Sub-Saharan Africa, including Nigeria, bears the highest burden, with women and girls representing 63% of all new HIV infections in the region (WHO, 2021). Nigeria alone accounts for 1.4% of the global HIV epidemic (Ukaegbu et al., 2022).

Antiretroviral Therapy (ART) has been a transformative advancement in the management of HIV, reducing the likelihood of disease transmission, suppressing viral loads, and converting what was once a fatal disease into a manageable chronic condition. However, the effectiveness of ART is contingent upon timely initiation, continuous care, and, crucially, high levels of adherence to the prescribed regimen (Adeoti et al., 2019). Adherence to ART has been recognized as the most critical factor in controlling HIV progression, with a 95% adherence rate resulting in undetectable viral loads, improved immune function, and reduced mortality and morbidity associated with HIV/AIDS (Adeoti et al., 2019).

Despite these benefits, poor adherence to ART remains a significant challenge, particularly in sub-Saharan Africa. Factors such as low CD4 count, depression, anxiety disorders, and undiagnosed mental health issues are frequently associated with suboptimal adherence (Adeoti et al., 2019). These psychological conditions can impede an individual's ability to comply with ART regimens, thereby undermining the goals of HIV treatment and preventing the achievement of global targets such as the UNAIDS 90-90-90 initiative, which aims for 90% of people living with HIV to be diagnosed, 90% of those diagnosed to be on ART, and 90% of those on ART to have undetectable viral loads (Adeoti et al., 2019).

Additionally, the complexity of the treatment schedule, the large number of pills, and the presence of depressive symptoms contribute to the low adherence rates observed in many patients (WHO, 2018). These barriers are further compounded by socioeconomic challenges, stigma, and a lack of adequate support systems. The World Health Organization (WHO, 2018) advocates for early initiation and expanded access to ART to reduce mortality and improve the quality of life for people living with HIV/AIDS. Therefore, understanding the factors that affect ART adherence is crucial for developing effective interventions to improve treatment outcomes.

This study seeks to investigate the factors associated with ART adherence among HIV-positive women in Ibadan, Nigeria, in order to identify key barriers and facilitators to adherence, with the ultimate goal of improving ART outcomes and reducing HIV transmission within this population.

1. 3. Justification for the Study

Adherence to Antiretroviral Therapy (ART) is crucial for effective HIV management, as poor adherence can lead to drug resistance, increased viral loads, and heightened transmission risks. In Nigeria, women of reproductive age represent a significant proportion of individuals living with HIV and face unique challenges related to pregnancy, childbirth, and breastfeeding, making ART adherence particularly vital for preventing maternal and neonatal complications.

Identifying the factors influencing ART adherence among this population is essential for developing targeted interventions. The predisposing, reinforcing and enabling factors all shape adherence patterns, and addressing barriers such as stigma, socioeconomic constraints, and limited healthcare access can significantly improve adherence rates. This study contributes to the growing body of research on HIV management in resource-limited settings, offering insights to enhance adherence and improve health outcomes for women living with HIV.

1.4. General Objective

To investigate the factors associated with adherence to ART among HIV-positive women attending Adeoyo Maternity Teaching Hospital, Yemetu, Ibadan, Nigeria.

1.4.1 Specific Objectives

1. To determine the predisposing factor of women living with Human Immunodeficiency Virus towards adherence to ART among women in Adeoyo maternity teaching hospital Yemetu, Ibadan.
2. To determine the reinforcing factor of women living with Human Immunodeficiency Virus towards adherence of ART among women in Adeoyo maternity teaching hospital Yemetu, Ibadan.
3. To determine the enabling factors of women living with Human Immunodeficiency Virus towards adherence to ART among infected women in Adeoyo maternity teaching hospital Yemetu, Ibadan.

1.4.2 Research Questions

1. What are the predisposing factors of women living with HIV towards adherence to ART among women in Adeoyo maternity teaching hospital Yemetu, Ibadan?

2. What are the reinforcing factors of women living with HIV towards adherence of ART among women in Adeoyo maternity teaching hospital Yemetu, Ibadan?

3. What are the enabling factors of women living with HIV towards adherence to ART among infected women in Adeoyo maternity teaching hospital Yemetu, Ibadan?

1.4.3 Research Hypothesis

1. **H_0:** There is no significant relationship between level of predisposing and reinforcing factor of women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan.
2. **H_0:** There is no significant relationship between reinforcing and enabling factor of women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan.
3. **H_0:** There is no significant relationship between level of predisposing and enabling factor women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan.

2.0 Methodology

2.1 Research Design

A descriptive cross-sectional study design was used. This design was allowed for the collection of data at a single point in time from a representative sample of HIV-positive women attending Adeoyo Maternity Teaching Hospital, Ibadan.

2.2 Study Setting

The study was conducted at Adeoyo Maternity Teaching Hospital, Yemetu, Ibadan, Oyo State, Nigeria. The hospital is a major healthcare facility providing maternal and child health services, including ART to HIV-positive women.

2.3 Target Population

The target population includes HIV-positive women aged 15–49 years who are currently receiving ART at the hospital.

2.3.1 Inclusion Criteria

- HIV-positive women aged 15–49 years.
- Women currently receiving ART at Adeoyo Maternity Teaching Hospital.
- Women who consent to participate in the study.

2.3.2 Exclusion Criteria

- Men or children receiving ART.
- Women not currently on ART.
- Women who do not provide informed consent.

2.4 Sample Size Determination

$$N = \frac{Z\alpha^2 P(1-P)}{D^2}$$

Where;

N= Sample size

$Z\alpha^2$ = Standard normal deviation at 95%

Confidence interval (1.96)

P = estimated prevalence at 50%

$$N = \frac{(1.96)^2 \times 0.194(1-0.194)}{0.05^2}$$

N = 240 respondents

10% of calculated sample size will be added to accommodate for non-response by participants.

240 + 24 = 264

Approximately 264 respondents will be recruited for the study

Using Cochran's formula for sample size calculation, the estimated sample size is 240, with an additional 10% to account for non-response, bringing the total to 264 participants.

2.5 Sampling Technique

A purposive sampling method was used to select participants, ensuring that only HIV-positive women on ART are included. Simple random sampling was used to select the final sample from eligible women.

2.5.1 Instrument of Data Collection

Data will be collected using a structured self-administered questionnaire, designed to assess:

- Sociodemographic factors.
- Psychological factors such as stigma and mental health.
- Healthcare service-related factors.
- Family support and knowledge of ART.

2.6 Validity of Research Instrument

The questionnaire was reviewed by experts in the field of HIV/AIDS, public health, and social sciences to ensure its content and construct validity. A pilot study was conducted to refine the instrument.

2.7 Reliability of Research Instrument

Reliability was tested using Cronbach's alpha to ensure internal consistency. A pre-test was carried out with a small sample (10% of the study population) to identify any issues with the questionnaire.

2.8 Method of Data Collection

Data was collected by trained enumerators who assisted participants in completing the self-administered questionnaires. The enumerators ensured confidentiality and provide necessary support to the participants.

2.9 Data Analysis Plan

Data was analyzed using SPSS version 25. Descriptive statistics (frequencies, percentages) was used for sociodemographic data. Pearson's correlation and regression analysis was used to test the relationships between the study variables.

12.10 Ethical Permission/Issues

Ethical approval was sought from the Institutional Review Board of Adeoyo Maternity Teaching Hospital and Adeleke University. Informed consent was obtained from all participants, and their privacy was respected.

3. RESULTS

3.1 SOCIO-DEMOGRAPHIC DATA

The age distribution showed that close to half of the participant were between 31-40 years old (120; 46.0%) and the mean of the age distribution was 33.84±7.799 years. Religious distribution showed that more than two third of the respondents were from the Yoruba tribe (180; 69.0%). Close to two third, 162 (61.7%) were married. About half (52.9%) of the respondents were Christians ams lastly, above one third (99; 37.9%) were employed.

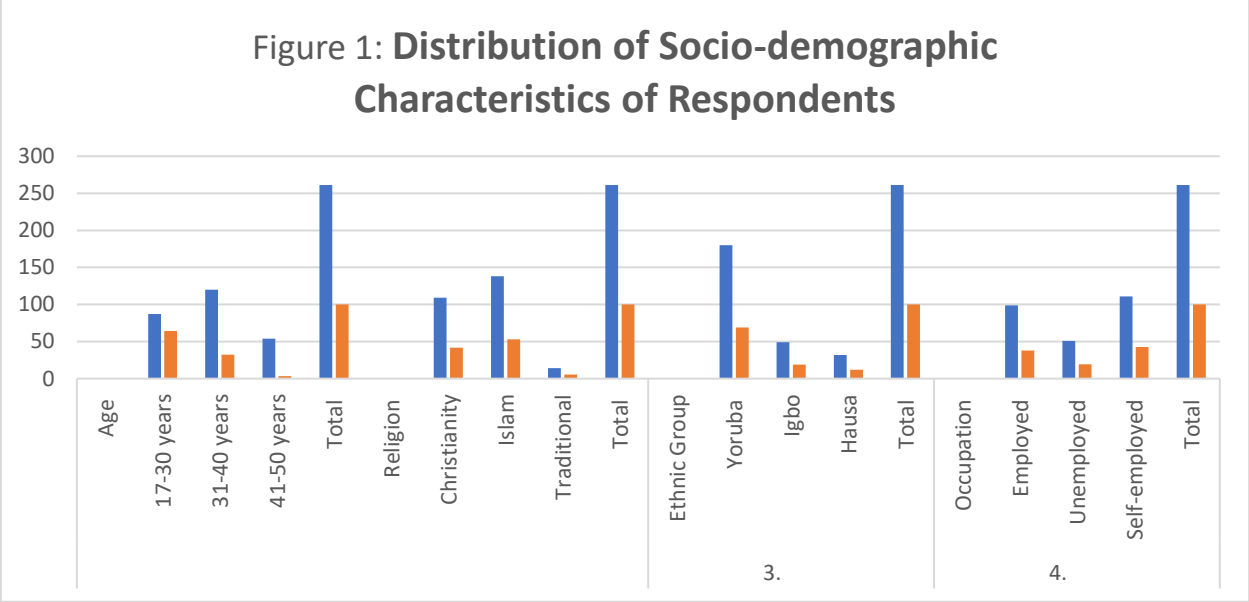

Table 1: Distribution of Socio-demographic Characteristics

S/N	Variables	Frequency (N)	Percentage (%)
1.	**Age**		
	17-30 years	87	64.1
	31-40 years	120	32.4
	41-50 years	54	3.5
	Total	**261**	**100.0**
2.	**Religion**		
	Christianity	109	41.8
	Islam	138	52.9

	Traditional	14	5.4
	Total	**261**	**100.0**
3.	**Ethnic Group**		
	Yoruba	180	69.0
	Igbo	49	18.8
	Hausa	32	12.2
	Total	**261**	**100.0**
4.	**Occupation**		
	Employed	99	37.9
	Unemployed	51	19.5
	Self-employed	111	42.5
	Total	**261**	**100.0**

PREDISPOSING FACTORS INFLUENCING ANTIRETROVIRAL THERAPY

One-third (87; 33.3%) of the participants disagreed that ART adherence does not help to suppress their CD4 count, though more than half (52.9%) agreed that they feel better after adhering to their ART medication. One hundred and thirteen respondents (113; 43.3%) agreed that they could not come down with opportunists' infection if they do not adhere to the ART; close to half (47.9%) strongly agreed that despite the duration of the ART, they will still adhere to it. Similarly, close to half (47.5%) agreed that they do not feel bothered about the pill burden of the ART; 61.7% of the respondents disagreed that refusal to adhere does not lead to getting AIDS faster and lastly, a little above half (52.1%) agreed that irregular intake of ART can lead to death(See Table 4.2).

Table 2 Distribution of Predisposing Factors Influencing Antiretroviral Therapy

S/N	QUESTIONS	SA N (%)	A N (%)	D N (%)	SD N (%)
1.	The ART adherence does not help to suppress my CD4 count	47 (18.0)	64 (24.5)	87 (33.3)	63 (24.1)
2.	I feel better after adhering to my ART medication	100 (38.3)	138 (52.9)	22 (8.4)	1 (0.4)
3.	I cannot come down with opportunists infection if I do not adhere to the ART	72 (27.6)	113 (43.3)	55 (21.1)	21 (8.0)
4.	Despite the duration of the ART, I will still adhere to it 1	125 (47.9)	106 (40.6)	22 (8.4)	8 (3.1)
5.	I do not feel bothered about the pill burden of the ART	94 (36.0)	124 (47.5)	33 (12.6)	10 (3.8)
6.	Refusal to adhere to does not lead to getting AIDS faster	29 (11.1)	28 (10.7)	161 (61.7)	43 (16.5)
7.	Irregular intake of my ART can lead to death	78 (29.9)	136 (52.1)	28 (10.7)	19 (7.3)

Respondents' Level of Predisposing Factors Influencing Antiretroviral Therapy

The level of the Predisposing Factors Influencing Antiretroviral Therapy among the respondents was computed on a 21-point scale and the distribution showed that only 43 (16.5%) respondents had poor level of Predisposing Factors Influencing Antiretroviral Therapy while most (218; 83.5%) respondents had a good level of Predisposing Factors Influencing Antiretroviral Therapy. The mean±SD of the respondents' predisposing factor was 13.39±3.222 (See Table 4.4).

Figure 2: Level of predisposing factors influencing Antiretroviral Therapy among Respondents

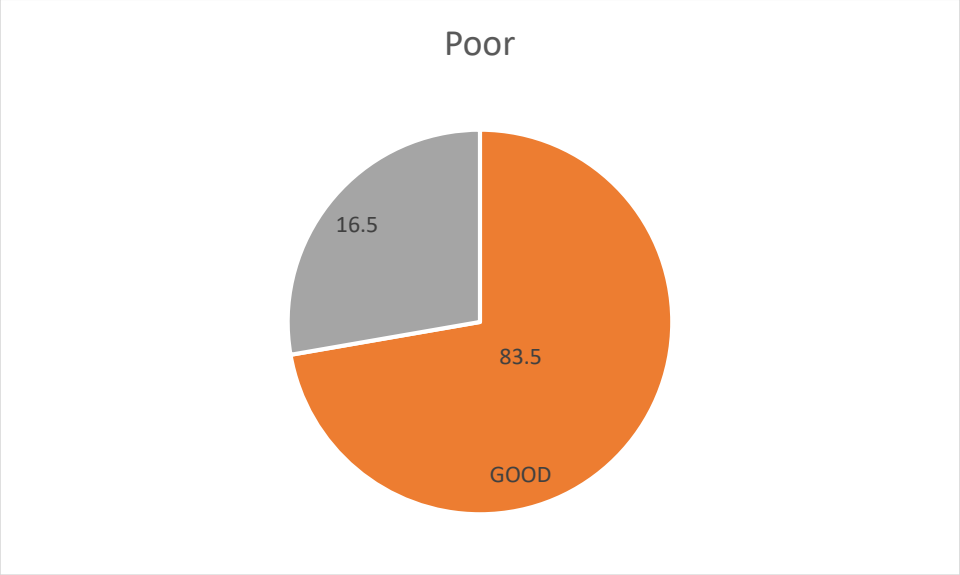

Figure 2

Table 3: Level of predisposing factors influencing Antiretroviral Therapy among Respondents

Predisposing factors (21-point scale)	**Category**	**N**	**%**	**Mean**	**SD**
Poor	**0 – 10**	43	16.5	13.39	3.222
Good	**11-21**	218	83.5		
Total		**261**	**100**		

REINFORCING FACTORS INFLUENCING ANTIRETROVIRAL THERAPY

The protective factors among the respondents was assessed with a 21-item scale. The distribution showed that close to half (48.3%) respondents strongly agreed that get the emotional help and support I need from family to adhere to their ART; over one third of the respondents (33.3%) disagreed that they cannot count on friends to encourage them when they do not feel like using my ART. More than one quarter of the respondents, (27.2%) strongly agreed that their family members are not willing to help them make the decision to adhere to ART. A hundred and fifteen (44.1%) strongly agreed that their sexual partner supports and encourages them to adhere to ART and similarly, 42.1% strongly agreed that they can talk to their family when having issues adhering to their ART. Close to half (49.0%) of the respondents strongly agreed they believe that following the treatment plan could make them healthy and lastly, only 11.5% strongly disagreed that most times they do not feel motivated to adhere to their medication.

Table 4: Distribution of Reinforcing Factors Influencing Antiretroviral Therapy

S/N	**QUESTIONS**	**SA** **N (%)**	**A** **N (%)**	**D** **N (%)**	**SD** **N (%)**
1.	I get the emotional help and support I need from my family to adhere to my ART	126 (48.3)	96 (36.8)	27 (10.3)	12 (4.6)
2.	I cannot count on my friends to encourage me when I do not feel like using my ART	55 (21.1)	87 (33.3)	100 (38.3)	19 (7.3)
3.	My family members are not willing to help me make the decision to adhere to ART	71 (27.2)	76 (29.1)	77 (29.5)	37 (14.2)
4.	My sexual partner supports and encourage me to adhere to ART	115 (44.1)	101 (38.7)	36 (13.8)	9 (3.4)

5.	I can talk to my family when I have issues with adhering to my ART	110 (42.1)	83 (31.8)	43 (16.5)	25 (9.6)
6.	I believe that following the treatment plan can make me healthy	128 (49.0)	110 (42.1)	21 (8.0)	2 (0.8)
7.	Most times I do not feel motivated to adhere to my ART medication	56 (21.5)	79 (30.3)	96 (36.8)	56 (21.5)

Respondents' Level of Reinforcing Factors Influencing Antiretroviral Therapy

The level of the Reinforcing Factors Influencing Antiretroviral Therapy among the respondents was computed on a 21-point scale and the distribution showed that only 39 (14.9%) respondents had negative reinforcing Factors Influencing Antiretroviral Therapy while most (222; 85.1%) respondents had a positive reinforcing Factors Influencing Antiretroviral Therapy. The mean±SD of the respondents' predisposing factor was 12.98±2.598

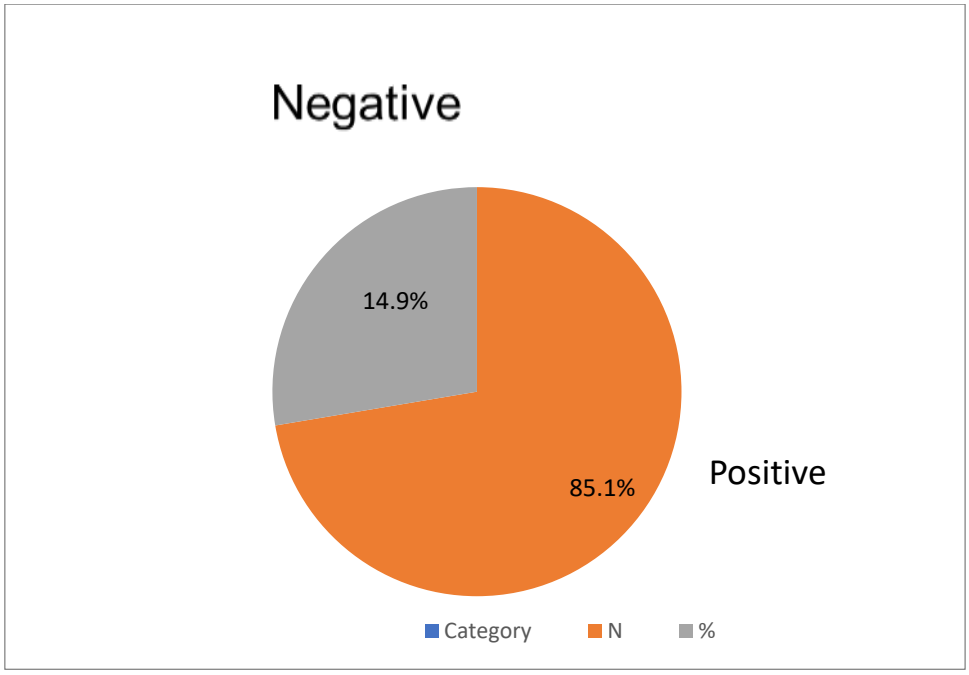

Figure 3: Level of reinforcing factors influencing Antiretroviral Therapy among Respondents

Table 5: Level of reinforcing factors influencing Antiretroviral Therapy among Respondents

Reinforcing factors (21-point scale)	**Category**	**N**	**%**	**Mean**	**SD**
Negative	**0 – 10**	39	14.9	12.98	2.598
Positive	**11-21**	222	85.1		
Total		**261**	**100**		

ENABLING FACTORS INFLUENCING ANTIRETROVIRAL THERAPY

The result from the study showed that 40.2% of the respondents disagreed that they are unable to adhere to their medications because the distance from their house to the hospital is too far; more so, close to half (46.0%) disagreed that they are unable to understand the instructions given to the in order to adhere to ART. One hundred and five (40.2%) respondents also strongly disagreed that the hospital is usually not accessible to get their medications and more than half (59.0%) of the respondents strongly agreed that the hospital workers are usually friendly while attending to them. Lastly, close to one-third (32.2%) of the respondents disagreed that the doctor does not encourage them to come to the hospital for their medication.

Table 6: Distribution of Enabling Factors Influencing Antiretroviral Therapy

S/N	QUESTIONS	SA N (%)	A N (%)	D N (%)	SD N (%)
1.	I am unable to adhere to my medications because the distance from my house to the hospital is too far	30 (11.5)	29 (11.1)	105 (40.2)	97 (37.2)
2.	I am unable to understand the instructions given so I am unable to adhere to the ART	13 (5.0)	38 (14.6)	120 (46.0)	90 (34.5)
3.	The hospital is usually not accessible to get my medications	15 (5.7)	31 (11.9)	110 (42.1)	105 (40.2)
4.	The hospital workers are usually friendly while attending to us	154 (59.0)	85 (32.6)	17 (6.5)	5 (1.9)
5.	The doctor doesn't encourage me to come to the hospital for my medication	8 (3.1)	25 (9.6)	84 (32.2)	144 (55.2)

Respondents' Level of Enabling Factors Influencing Antiretroviral Therapy

The level of the enabling Factors Influencing Antiretroviral Therapy among the respondents was computed on a 15-point scale and the distribution showed that only thirty seven (14.2%) respondents had negative enabling Factors Influencing Antiretroviral Therapy while majority (224; 85.8%) respondents had a positive enabling Factors Influencing Antiretroviral Therapy. The mean±SD of the respondents' predisposing factor was 11.18±2.990

Table 7: Level of enabling factors influencing Antiretroviral Therapy among Respondents

Enabling factors (15-point scale)	Category	N	%	Mean	SD
Negative	**0 – 7**	37	14.2	11.18	2.990
Positive	**8-15**	224	85.8		
Total		**261**	**100**		

RESEARCH HYPOTHESES

Research Hypothesis 1

H_o1: There is no significant relationship between level of predisposing and reinforcing factor of women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan.

A correlation test was conducted to determine the relationship between the predisposing and reinforcing factors among women living with HIV. The results showed that there was a statistically significant relationship between the variables ($r = 0.515$; $p = 0.000$). A linear regression model showed that the predisposing factors contributed to 26.6% ($r^2 = 0.266$) of the change in the level of the respondents reinforcing factors. Thus, the null hypothesis is rejected.

Table 8: Relationship between the Predisposing factors and the Reinforcing factors

Variables	N (%)	r	r^2	*p*
Predisposing factors vs Reinforcing factors	261 (100)	0.515	0.266	0.000*

*significant at $p < 0.05$

H_o2: There is no significant relationship between reinforcing and enabling factor of women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan.

A correlation test was conducted to determine the relationship between the reinforcing and enabling factors among women living with HIV. The results showed that there was a statistically significant relationship between the variables (r = 0.412; p = 0.000). A linear regression model showed that the reinforcing factors contributed to 16.9% (r^2 = 0.169) of the change in the level of the respondents enabling factors. Thus, the null hypothesis is rejected.

Table 9: Relationship between the Reinforcing factors and Enabling Factors

Variables	N (%)	r	r^2	*p*
Reinforcing factors vs Enabling factors	261 (100)	0.412	0.169	0.000*

*significant at p < 0.05

H_o3: There is no significant relationship between the predisposing and enabling factor women living with Human Immunodeficiency Virus towards adherence to ART among women of reproductive age in Adeoye maternity teaching hospital Yemetu, Ibadan

A correlation test was conducted to determine the relationship between the predisposing and enabling factors among women living with HIV. The results showed that there was a statistically significant relationship between the variables (r = 0.393; p = 0.000). A linear regression model showed that the predisposing factors contributed to 15.4% (r^2 = 0.154) of the change in the level of the respondents enabling factors. Thus, the null hypothesis is rejected.

Table 10: Relationship between the Predisposing factors and Enabling Factors

Variables	N (%)	R	r^2	*p*
Predisposing factors vs Enabling factors	261 (100)	0.393	0.154	0.000*

*significant at p < 0.05

4.1 Discussion of Findings

The study discussed the significance of the findings in the context of existing literature on ART adherence. It highlighted the factors that significantly influence ART adherence and compare the results with studies from other regions.

4.2 Discussion

HIV/AIDS continues to be a significant global health challenge, particularly in sub-Saharan Africa, where it disproportionately affects women. The introduction of Antiretroviral Therapy (ART) has significantly improved HIV management, reducing viral load and preventing mother-to-child transmission (WHO, 2010; Nachega et al., 2016). However, despite the effectiveness of ART, poor adherence remains a major barrier to achieving optimal treatment outcomes. Studies have shown that non-adherence can result in drug resistance, higher viral loads, and increased transmission rates (Epstein, 2011; Dibaba et al., 2017). This is particularly concerning in Nigeria, where ART coverage is extensive, but adherence remains suboptimal, particularly among women of reproductive age, who face additional challenges such as pregnancy, breastfeeding, and socio-economic barriers.

This study revealed that predisposing, reinforcing, and enabling factors all played significant roles in ART adherence. Predisposing factors such as biological and socio-economic conditions influenced participants' health beliefs and treatment adherence. The results align with previous studies that have found that social support significantly enhances ART adherence (Reblin & Uchino, 2008; Logie et al., 2017). In this study, participants with higher levels of social support showed better adherence, consistent with findings that emphasize the importance of family and community support in managing chronic diseases like HIV (Turan et al., 2019; Shahin et al., 2021).

Enabling factors, such as financial resources and access to healthcare services, were also identified as crucial in supporting adherence to ART. Previous research has shown that economic hardship, lack of insurance, and logistical challenges, including transportation difficulties, significantly hinder ART adherence (Goldsmith et al., 2017; Garavalia et al., 2009). Our findings further confirm that improving access to healthcare services and addressing financial barriers is essential to improving adherence rates.

The study also identified a significant relationship between the various factors, highlighting the interconnectedness of socio-economic conditions, healthcare access, and social support in influencing ART adherence. These results reinforce the need for a comprehensive approach to HIV care that integrates both medical treatment and socio-economic support systems.

4.3 Recommendations

1. The HIV community, particularly people living with HIV/AIDS (PLWHA), should be provided with integrated support systems that include family, peer, and healthcare support. The government should play a more active role in addressing stigma and discrimination through public awareness campaigns, thereby promoting social acceptance and encouraging more individuals to participate in support networks.
2. Healthcare providers, medical staff, and volunteers should engage at the community level to increase participation in social support systems. This can be achieved by utilizing available network platforms to educate and encourage PLWHA to actively participate in programs aimed at improving medication adherence.
3. There is a need for policy reforms to improve medical insurance coverage, especially for economically vulnerable populations, including migrants. Expanding insurance coverage will enhance access to healthcare services, reduce financial burdens, and encourage consistent use of ART, ultimately leading to better health outcomes in these populations.

5. Conclusion

This study examined the factors associated with ART adherence among HIV-positive women attending Adeoyo Maternity Teaching Hospital in Ibadan, Nigeria. The findings showed that predisposing factors (such as socio-economic conditions), reinforcing factors (like social support), and enabling factors (including financial and healthcare access) significantly influenced ART adherence. These interconnected factors must be considered in the development of interventions aimed at improving treatment adherence and overall health outcomes. The importance of addressing these variables in HIV care is critical for enhancing medication adherence and preventing HIV-related complications.

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