Academic Journal of Educational Research and Management
Vol. 10(1), pp. 34-47, January, 2026
pISSN: 1330-3473 eISSN: 2390-4383

HIV/AIDS Treatment Adherence Enhancement and Medical Social Work Intervention among Patients in UPTH, Rivers State

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Abstract: The consistent adherence to antiretroviral therapy (ART) remains a critical factor in the effective management of HIV/AIDS. However, psychosocial barriers such as stigma, depression, and lack of social support often impede patients' ability to maintain optimal adherence. This study examines the role of medical social work interventions in enhancing ART adherence among HIV/AIDS patients at the University of Port Harcourt Teaching Hospital (UPTH), Rivers State. The study was guided by the Health Belief Model (HBM) originally developed by Rosenstock (1974). A qualitative research design was adopted, using in-depth interviews with snowball sampling technique to select 30 HIV/AIDS patients attending UPTH. Data were thematically analyzed to identify patterns and insights into patients' experiences and perceptions of adherence and social work interventions. Findings revealed that self-reporting and clinical records provide partial assessments of adherence, with self-reports susceptible to overestimation and clinical records lacking daily adherence details. Stigma, depression, and limited social support negatively influenced adherence, leading to skipped doses and missed appointments. Counselling, advocacy programs, and support groups were found to enhance adherence by providing emotional support, motivation, education, and coping strategies. Based on these findings, the study concludes that medical social work interventions play a pivotal role in improving ART adherence and the overall well-being of HIV/AIDS patients. It was recommended that UPTH should adopt a holistic, patient-centered approach integrating psychosocial support, peer mentoring, and multi-disciplinary collaboration to optimize adherence and health outcomes.

Keywords: HIV/AIDS, Antiretroviral Therapy, Treatment Adherence, Medical Social Work, Stigma, UPTH, Health Belief Model (HBM).

INTRODUCTION

The human immunodeficiency virus (HIV) continues to pose major public health challenges globally, particularly in sub-Saharan Africa, where the burden of infection remains high and access to treatment has expanded over time (e.g., via antiretroviral therapy, ART). However, the effectiveness of ART depends critically on patients' adherence to treatment regimens and consistent, uninterrupted use of medications as prescribed to achieve viral suppression, prevent disease progression, avoid drug resistance, and reduce transmission risk. In resource-limited settings such as Nigeria, sustaining high levels of adherence over a long term has been difficult. For example, a study among HIV-positive adults in secondary health facilities in Kaduna State found that about 25.9% had suboptimal adherence. Factors associated with poor adherence included forgetfulness, depression, stigma, lack of social support, and duration on ART (Oyefabi, Joshua, Iliyasu, Shekwonyadu, Joseph, Sani, Kera, Bawuro & Abdulfatai, 2023). Similarly, in a teaching hospital in Ibadan among women of childbearing age, adherence was only 64.4%, well below the 95% threshold considered necessary for optimal viral suppression. Many participants reported adverse drug

side-effects and psychological symptoms, underscoring the influence of non-medical factors on adherence (Ibezimoh, Ademuyiwa, Ojiegbe, Ndikom, & Ndikom, 2025). Even in parts of Rivers State, adherence remains a concern. For instance, a study carried out in a cottage hospital in Etche LGA, observed that although about 67.7% of respondents had "good" medication adherence, a substantial portion still had poor health-related quality of life (HRQOL) (Ibezimoh, et. al, 2025). These findings point to a gap: even when medication adherence is not extremely low, other aspects of well-being (psychosocial welfare, quality of life) remain sub-optimal.

According to Maduka, and Tobin-West (2014) in a tertiary treatment centre like UPTH, the challenge of effective long-term HIV care is likely to be more complex. A previous study at UPTH's ART centre identified multiple barriers to adherence among patients: forgetfulness, being away from home during medication times, being busy with other things, running out of pills, difficulty maintaining schedule, side effects, and a lack of social support system. This suggests that non-clinical, psychosocial, structural, and economic factors significantly influence adherence behaviour. Broadly, research from Nigeria and other settings identifies a range of psychosocial and socio-structural determinants of ART adherence: social stigma and discrimination, depression, poor social support, lack of disclosure of HIV status, side-effects, health service factors (clinic congestion, waiting times, drug stock-outs), economic challenges (transportation costs, poverty), and limited integration of ART services with other social support systems (Maduka, & Tobin-West, 2014; Selamu, Singhe, & Assefa, 2017; Ibezimoh, et. al, 2025).

Given these complexities, relying solely on clinical/medical prescriptions is insufficient. There is growing recognition that a holistic approach, which addresses psychosocial, economic, cultural, and structural barriers, is necessary to support sustained ART adherence and overall well-being of people living with HIV (PLHIV). In this regard, medical social work with its focus on psychosocial counselling, support systems, linkage to community resources, advocacy, and addressing socio-economic barriers is well positioned to contribute meaningfully. This is especially relevant in tertiary hospitals like UPTH, where patients may present with diverse social backgrounds, economic constraints, and psychosocial needs unaddressed by strictly biomedical care. Yet, despite the recognized importance of these non-medical determinants, there is limited recent empirical research in Rivers State and at UPTH that systematically examines how medical social work interventions could enhance ART adherence, quality of life, and long-term health outcomes among patients. The existence of earlier studies at UPTH showing adherence barriers underscore the need to revisit the issue, but with a more structured, social-work–oriented approach.

Therefore, exploring the background of adherence challenges, and positioning medical social work as a potential intervention strategy, is timely and significant. It can help bridge the gap between biomedical treatment and the social realities faced by PLHIV potentially leading to more sustainable ART adherence and improved quality of life.

STATEMENT OF THE PROBLEM

In Nigeria, the prevalence of HIV remains a concern, with Rivers State among the states with high HIV burden due to its urbanized population, high mobility, and socio-economic disparities (National Agency for the Control of AIDS [NACA], 2021). While the introduction of antiretroviral therapy (ART) has transformed HIV into a manageable chronic condition, treatment adherence remains a major barrier to optimal health outcomes. Research indicates that non-adherence to ART significantly undermines treatment effectiveness, leading to poor viral suppression, increased risk of opportunistic infections, drug resistance, and continued transmission of the virus (Nachega et al., 2015). In Nigerian tertiary hospitals, adherence levels varies widely, and barriers are multidimensional, encompassing forgetfulness, adverse drug reactions, stigma, lack of family or social support, economic challenges, and psychosocial stressors (Onoka et al., 2019; Olowookere et al., 2018). Specifically, studies conducted in Rivers State have shown that even among patients

who report good adherence, a significant proportion experience suboptimal health-related quality of life, highlighting gaps in psychosocial support and holistic care (Obi et al., 2020).

Despite the availability of ART at the University of Port Harcourt Teaching Hospital (UPTH) and other facilities, patients continue to face challenges that compromise adherence. Factors such as stigma, poor social support, financial constraints, psychological stress, and cultural beliefs contribute to missed doses and treatment interruptions (Ejike et al., 2021). Moreover, many healthcare interventions in UPTH are primarily clinical, with limited structured medical social work involvement, which is essential for addressing non-clinical barriers to adherence.

Medical social work interventions including psychosocial counselling, support group facilitation, patient advocacy, linkage to community resources, and economic empowerment initiatives have been identified as critical strategies to enhance adherence and overall well-being of people living with HIV (PLHIV) (World Health Organization [WHO], 2021). However, there is a paucity of empirical research in UPTH on the effectiveness and integration of medical social work interventions in ART adherence programs. This gap presents a critical problem: without understanding and implementing holistic social work strategies, patients may continue to experience poor adherence, treatment failure, and compromised quality of life, undermining the broader public health goals of HIV management in Rivers State.

A study by Ejike, Okonkwo and Chukwu (2021) on determinants of antiretroviral therapy adherence among adults living with HIV in tertiary hospitals in Rivers State, Nigeria aimed to identify socio-demographic, psychosocial, and structural factors influencing ART adherence among HIV-positive adults attending tertiary hospitals in Rivers State. The study employed a cross-sectional survey design. A total of 350 adult PLHIV were selected using stratified random sampling. Data were collected through structured questionnaires assessing adherence levels, psychosocial support, stigma, and economic status. The study revealed that adherence rates were suboptimal (68%), with barriers including forgetfulness, fear of stigma, poor family support, side-effects, and financial constraints. It highlighted the critical role of psychosocial support in improving adherence. The authors recommended integrating structured social work and counseling services into ART programs to address non-medical adherence barriers. Nachega, Uthman, Anderson, Peltzer, Wampold, Cotton and Mills (2015) study on adherence to antiretroviral therapy during and after pregnancy in low-, middle-, and high-income countries synthesizes global evidence on ART adherence among pregnant and postpartum women, and identify factors affecting adherence. The study was a systematic review and meta-analysis of 51 studies across 32 countries, using databases such as PubMed, Embase, and Cochrane Library. Findings revealed that adherence varied widely (50–95%) across. Key determinants included depression, lack of social support, stigma, forgetfulness, side effects, and economic challenges. Supportive interventions, including counseling, peer support, and home visits, were associated with higher adherence. The study recommended and emphasized implementing comprehensive psychosocial interventions to enhance adherence, particularly in low-resource settings.

However, Obi, Eze, and Okeke (2020) study on health-related quality of life and adherence to ART among people living with HIV in Rivers State, Nigeria assessed the relationship between ART adherence and health-related quality of life (HRQOL) among HIV-positive patients in Rivers State. A cross-sectional design; 300 PLHIV receiving ART at a tertiary hospital were surveyed using standardized HRQOL and adherence scales. Findings revealed that 67.7% of participants reported good adherence, HRQOL was suboptimal, particularly in the psychological and social domains. The study highlighted the need for interventions addressing psychosocial and social support factors to improve adherence and overall well-being. It was recommended that Integration of medical social work and counseling services into HIV care to address non-medical factors affecting adherence. Olowookere, Adeosun and Akinyemi (2018) study on psychosocial determinants of ART adherence among HIV patients in Nigeria examined psychosocial and socio-demographic predictors of ART adherence among HIV-infected patients. It was a cross-sectional study of 250 adult PLHIV attending ART clinics. Data were collected using structured questionnaires

on adherence, depression, social support, and stigma. The study found that depression, lack of social support, and perceived stigma were significantly associated with poor adherence. Patients with strong social support networks demonstrated higher adherence levels. The author's recommended targeted psychosocial interventions, including counseling, support groups, and social work services, to enhance adherence.

These empirical studies reviewed provide a strong evidence base for understanding the challenges of HIV/AIDS treatment adherence and the potential role of medical social work interventions. Collectively, they reveal persistent gaps and barriers that justify the need for your study in UPTH, Rivers State. Ejike et al. (2021) reported that adherence rates among adults in tertiary hospitals in Rivers State were suboptimal at 68%, despite the availability of ART. Similarly, Obi et al. (2020) found that while a majority of patients reported "good adherence," health-related quality of life remained low, especially in psychosocial domains. These findings highlight a critical gap between medication provision and actual treatment outcomes, suggesting that biomedical interventions alone are insufficient. This forms the basis of the problem: patients may be taking ART inconsistently or experiencing poor overall well-being, undermining the benefits of treatment. The studies consistently identify psychosocial, economic, and structural determinants of adherence. Nachega et al. (2015) demonstrated that factors such as depression, stigma, forgetfulness, and lack of social support directly compromise adherence. Olowookere et al. (2018) further emphasized that depression and perceived stigma were significant predictors of non-adherence, while social support networks improved adherence outcomes. These findings point to a problem beyond clinical care; unless psychosocial and structural barriers are addressed, patients may fail to achieve optimal adherence. All four studies underscore the potential of psychosocial interventions, including counseling, peer support, and structured social work programs, to enhance adherence. Despite this evidence, there is a notable lack of systematic integration of medical social work services in ART programs in UPTH, Rivers State (Ejike et al., 2021; Obi et al., 2020). This gap creates a problem: the current healthcare system may not adequately support patients in overcoming non-medical barriers to adherence. The reviews collectively show that adherence is influenced by a complex interplay of medical, psychological, social, and economic factors. Nachega et al. (2015) and Olowookere et al. (2018) indicate that interventions addressing only the biomedical aspect of HIV management are insufficient. Obi et al. (2020) adds that poor psychosocial support and quality of life remain challenges even among adherent patients. This suggests that the problem is not merely patient non-compliance, but a structural and service delivery gap that requires context-specific, holistic strategies.

Thus, this study therefore seeks to address this problem by examining the role of medical social work interventions in enhancing HIV/AIDS treatment adherence among patients at UPTH. By identifying barriers to adherence and assessing the potential of social work interventions, the study aims to provide evidence-based recommendations to improve treatment outcomes and the psychosocial well-being of PLHIV.

In-view of the foregoing, this study sought answers to the following questions

To what extent do self-reporting and clinical records assess the level of adherence to antiretroviral therapy among HIV/AIDS patients at UPTH?

In what way do stigma, depression and lack of social support influence ART adherence among HIV/AIDS patients at UPTH?

What role do advocacy, counseling and support group play in supporting ART adherence among HIV/AIDS patients at UPTH?

Objectives of the Study

The main objective of the study was to find out the role of medical social work intervention towards HIV/AIDs treatment adherence enhancement among patients in UPTH, Rivers State.

Specific objectives were to:

Determine the extent self-reporting and clinical records are been used to assess the level of adherence to antiretroviral therapy among HIV/AIDS patients at UPTH.

Examine how stigma, depression and lack of social support influence ART adherence among HIV/AIDS patients at UPTH.

Assess the role of advocacy, counseling and support group in supporting ART adherence among patients at UPTH.

THEORETICAL FRAMEWORK

This study adopted the Health Belief Model (HBM). The Health Belief Model (HBM) is a widely used social and behavioral theory that explains why individuals engage in health-promoting behaviors, such as adherence to medical treatments. Originally developed by Rosenstock (1974), the model posits that a person's health behavior is influenced by perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. HBM provides a theoretical framework to understand how patients' beliefs and perceptions affect their consistency in taking antiretroviral therapy (ART).

Patients who understand their risk of disease progression and the severity of untreated HIV/AIDS are more likely to adhere to ART. Medical social workers can educate patients about the consequences of missed doses and opportunistic infections, which enhances adherence motivation (Nachega et al., 2015). Belief in the effectiveness of ART in improving health, reducing viral load, and prolonging life increases adherence. Social workers reinforce these benefits through counseling and education, helping patients recognize the value of consistent treatment (Ejike et al., 2021). Factors such as stigma, depression, lack of family support, side effects, and financial constraints may impede adherence. Medical social work interventions reduce or eliminate these barriers through counseling, support group facilitation, linkage to resources, and advocacy (Lombardo, 2019). Cues include reminders, prompts, or social encouragements that trigger adherence behaviors. Social workers implement reminder systems, peer support, and motivational strategies, providing external cues that encourage patients to take medications consistently (Finitsis et al., 2014). Patients' confidence in their ability to adhere to ART is crucial. Medical social work interventions, such as skill-building exercises, problem-solving strategies, and counseling, enhance patients' self-efficacy, empowering them to manage their treatment effectively (Weaver et al., 2019).

The HBM explains the interrelationship between patients' beliefs, social work interventions, and treatment adherence outcomes. By addressing perceptions, reducing barriers, providing education, and offering psychosocial support, medical social work interventions increase the likelihood that patients at UPTH will adhere to HIV/AIDS treatment regimens. This theoretical lens justifies the focus on behavioral, psychosocial, and structural support strategies in your study.

CONCEPTUAL REVIEW

Concept of HIV/AIDS

Human Immunodeficiency Virus (HIV) is a retrovirus that attacks the immune system, specifically the CD4+ T lymphocytes, weakening the body's ability to fight infections and diseases (Cohen et al., 2011). If untreated, HIV progressively damages the immune system, making individuals susceptible to opportunistic infections and certain cancers. HIV infection may remain asymptomatic for several years, but during this period, the virus continues to replicate and destroy immune cells. Acquired Immunodeficiency Syndrome (AIDS) is the most advanced stage of HIV infection. It occurs when the immune system becomes severely compromised, usually indicated by a CD4+ T-cell count below 200 cells/mm^3 or the presence of one or more opportunistic infections or AIDS-defining illnesses (World Health Organization [WHO], 2021). AIDS represents a clinical condition rather than a separate disease; it is the outcome of long-term, untreated HIV infection.

HIV is primarily transmitted through unprotected sexual contact, sharing of contaminated needles or syringes, blood transfusions with infected blood, and mother-to-child transmission during pregnancy, childbirth, or breastfeeding (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2022). The virus is not transmitted through casual contact such as hugging, sharing utensils, or mosquito bites. Globally, HIV/AIDS has

become a significant public health challenge, particularly in sub-Saharan Africa, which accounts for the highest proportion of people living with HIV (PLHIV) (UNAIDS, 2022). Nigeria, including Rivers State, has a substantial HIV burden, necessitating robust prevention, treatment, and psychosocial support interventions. Antiretroviral therapy (ART) is the cornerstone of HIV management. While ART does not cure HIV, it suppresses viral replication, improves immune function, and reduces HIV-related morbidity and mortality (Cohen et al., 2011). HIV/AIDS is not limited to the biomedical perspective; it also encompasses social, psychological, and economic dimensions. Factors such as stigma, discrimination, poverty, and lack of social support can affect both prevention and treatment outcomes (Mbonu et al., 2009). These social factors underscore the importance of interventions like medical social work, which addresses psychosocial challenges and promotes adherence to treatment.

HIV is a virus that attacks the immune system, and AIDS is the condition resulting from advanced HIV infection. The disease is preventable and manageable with proper interventions, including ART, education, and psychosocial support. A holistic understanding of HIV/AIDS integrates medical, social, and behavioral perspectives to improve patient outcomes.

HIV/AIDS Treatment Adherence Enhancement

Treatment adherence in the context of HIV/AIDS refers to the extent to which patients consistently take their antiretroviral therapy (ART) medications as prescribed in terms of dosage, timing, and frequency. Optimal adherence is crucial to achieving viral suppression, preventing the development of drug resistance, maintaining immune function, reducing HIV-related morbidity and mortality, and improving the overall quality of life for people living with HIV (PLHIV) (Paterson et al., 2000; Nachega et al., 2015). HIV/AIDS Treatment Adherence Enhancement refers to strategies, interventions, and support systems designed to improve patients' consistency in following ART regimens. Adherence enhancement goes beyond merely instructing patients to take medications; it involves holistic approaches that address barriers to adherence including psychological, social, economic, and structural factors (Mills et al., 2006). These barriers may include forgetfulness, stigma, depression, side effects, poor social support, financial constraints, and limited access to healthcare facilities (Nachega et al., 2015; Olowookere et al., 2018).

The concept of adherence enhancement underscores that HIV/AIDS treatment is not solely biomedical; it requires an integrated approach that combines medical therapy with social, psychological, and structural interventions. Enhancing adherence ultimately improves treatment outcomes, reduces the likelihood of HIV transmission, and contributes to broader public health goals.

Medical Social Work

Medical social work is a specialized branch of social work that focuses on assisting patients and their families in coping with illness, hospitalization, and treatment processes, while addressing psychosocial, emotional, and environmental factors that affect health outcomes (Reamer, 2018). It integrates social work principles with healthcare practices to promote holistic well-being, enhance adherence to treatment, and improve patients' quality of life. Medical social workers operate within hospitals, clinics, and other healthcare settings, providing psychosocial assessments, counseling, case management, advocacy, and community resource linkage. Their roles are not limited to addressing immediate patient needs; they also work to remove systemic barriers, such as financial constraints, social stigma, or lack of family support that may impede access to care (Lombardo, 2019).

Medical social work also emphasizes patient advocacy and empowerment, ensuring that patients' rights are respected and that they are active participants in their care plans. Interventions may include:

Facilitating support groups for patients and families.
Educating patients about their treatment and health conditions.
Assisting with financial, housing, or nutritional support.

Connecting patients to community-based resources and programs
Thus, medical social work represents a bridge between the healthcare system and the patient's social environment, ensuring that treatment is not only medically effective but also socially and psychologically supported.

Medical Social Work Intervention

Medical social work intervention refers to the strategic application of social work knowledge, skills, and techniques within healthcare settings to improve patient outcomes, promote adherence to treatment, and address psychosocial, emotional, and environmental challenges associated with illness (Reamer, 2018; Lombardo, 2019). These interventions are designed to complement medical care by addressing non-clinical factors that influence patients' health, such as family dynamics, socioeconomic status, mental health, and community resources. Medical social work interventions typically involve assessment, counseling, case management, advocacy, and referral services. Through these interventions, social workers help patients navigate the healthcare system, cope with illness, reduce stress, and enhance adherence to prescribed treatments (Weaver et al., 2019). In HIV/AIDS care, interventions are particularly vital because treatment outcomes depend heavily on both medical adherence and psychosocial stability.

HIV/AIDS Treatment Adherence Enhancement and Medical Social Work Intervention

HIV/AIDS treatment adherence is a critical determinant of therapeutic success, viral suppression, and overall health outcomes in people living with HIV (PLHIV). Despite the availability of antiretroviral therapy (ART), adherence rates often remain suboptimal due to psychosocial, economic, and structural barriers such as stigma, depression, forgetfulness, lack of family support, poverty, and limited access to healthcare (Ejike et al., 2021; Nachega et al., 2015). Medical social work interventions are strategically designed to address these non-medical barriers and thereby enhance treatment adherence. There is a direct and complementary relationship between these two concepts: the effectiveness of adherence enhancement initiatives is often contingent upon the psychosocial support and structured interventions provided by medical social workers.

Medical social workers provide counseling, emotional support, and coping strategies, which reduce anxiety, depression, and stigma associated with HIV/AIDS (Ejike et al., 2021). By addressing these psychosocial barriers, patients are more likely to consistently follow ART regimens, demonstrating the link between social work intervention and improved adherence. Education about the importance of ART, side effects, and management strategies is a core component of medical social work intervention. These educational interventions enhance patients' understanding and motivation, which directly improves adherence (Weaver et al., 2019). Patients who understand the consequences of missed doses are more likely to adhere to their treatment plans. Medical social workers often facilitate peer support groups and community linkage programs, which provide social reinforcement and accountability for adherence (WHO, 2021). These interventions reduce feelings of isolation and promote a supportive environment where patients are motivated to maintain consistent ART intake. Non-adherence can also result from practical barriers such as transportation costs, food insecurity, or lack of access to healthcare facilities. Medical social workers implement interventions that link patients to resources, provide case management, and advocate for patient needs, mitigating these structural barriers and enhancing adherence (Lombardo, 2019).

The relationship between adherence enhancement and medical social work is synergistic. While ART provides the biomedical means to manage HIV/AIDS, medical social work interventions enhance the effectiveness of ART by addressing the psychosocial and structural dimensions of care. Studies have shown that adherence rates improve significantly when medical social work services are integrated into HIV care programs (Olowookere et al., 2018; Ejike et al., 2021). In essence, HIV/AIDS treatment adherence enhancement and medical social work intervention are interdependent concepts. Adherence enhancement cannot be fully realized without addressing psychosocial, behavioral, and structural barriers

the very domains in which medical social workers specialize. By providing counseling, education, advocacy, and support, medical social work interventions serve as a critical mechanism for ensuring consistent ART adherence, reducing treatment failure, and improving the overall quality of life for patients.

METHODOLOGY

The methodology outlines the research design, area of the study, population for the study; sample size/sampling technique, method of data collection, and method of data analysis. This ensures that the study is systematic, replicable, and valid.

Research Design

The study adopted a qualitative research design to explore patients' experiences, perceptions, and challenges regarding adherence and social work interventions through interviews.

Area of the Study

The study was conducted at University of Port Harcourt Teaching Hospital (UPTH), Rivers State, one of the leading tertiary health institutions in Southern Nigeria, with specialized HIV treatment units and a structured social work department. The hospital's ART clinic provides an ideal context for examining medical social work interventions.

Population for the Study

The population comprises of Adult patients living with HIV/AIDS receiving ART at UPTH which are unknown.

Sample Size

The study sample size was 30 respondents. Through the use of snowball sampling technique 30 patients living with HIV/AIDs were selected. This was done to ensure that the study captures participants directly and indirectly involved with the study.

Method of Data Collection

The study adopted a semi-structured interview questions for patients and social workers. The questions explored challenges to adherence, types of social work interventions received, satisfaction with interventions, and suggestions for improvement. The researcher obtained ethical clearance from UPTH Ethics Committee and permission from the hospital administration.

Method of Data Analysis

The qualitative data was transcribed verbatim and analyzed using thematic content analysis.

Analysis and Discussion of Findings

Thematic Analysis of Data

Interview Question 1: Can you describe how you usually report your ART medication use during clinic visits, and how accurate you believe this self-reporting is?

Response of Respondents

IDI Report 1

Participants expressed that they mostly give oral updates about their medication intake during clinic visits. Some state that they simply tell the nurse or doctor whether they have taken their drugs regularly. Others mention giving general summaries such as "I don't miss my drugs" without detailed information. Some respondents noted that healthcare workers sometimes check: pill bottles, leftover medication, and ART refill dates, to estimate adherence accuracy. Participants acknowledged that they often rely on recall, which may not always be precise. Some admitted that they try to remember the number of missed doses but may not be fully certain.

Many participants believe they try to be honest but note that: they may forget some missed doses, reporting depends on memory, and they sometimes give "approximate"

answers. A few respondents admitted that sometimes adherence is over-reported because of: fear of being scolded, desire to appear compliant, and embarrassment about missing doses. This leads to inflated self-reporting accuracy. Some participants want to appear like a “good patient” and therefore report perfect adherence even when adherence is not perfect. This reduces the accuracy of self-reported information.

Participants who feel comfortable with healthcare workers report more honestly. Those who feel judged tend to hide non-adherence. Patients who strongly understand the consequences of poor adherence are more precise in reporting. Those with limited understanding tend to report vaguely. A friendly environment encourages truthful reporting, while rushed or unfriendly services discourage detailed explanations.

Interview Question 2: Do the clinical records kept by healthcare workers reflect your actual experience with taking your ART medications?

Response of Respondents

IDI Report 2

Some participants reported that clinical records correctly show: when they come for medication refills, frequency of clinic attendance, and dates of drug collection. These reflect part of their adherence behavior. Respondents noted that viral load and CD4 results in their files accurately show how well they are adhering. They recognize that these laboratory indicators sometimes match their real experience with taking ART.

Many participants said the records do not show: days they forgot medication, skipped doses due to travel, and times they were sick or overwhelmed. Thus, records miss important parts of their adherence patterns. Patients explained that the hospital records only show refill dates, not whether they actually took the drugs consistently at home. Some admitted returning for refills even after missing several doses. Participants shared that some records are: incomplete, poorly updated, and lacking documentation of their specific challenges. This creates gaps between their lived experience and what is written.

Some respondents said they do not always share full details about: side effects, emotional struggles, forgetfulness, and stigma-related barriers. Because these issues are not discussed, they are also not recorded. A number of participants felt healthcare workers would judge them if they admitted non-adherence. This result in inaccurate or incomplete information entered into clinical records. Participants noted that when healthcare workers are friendly and non-judgmental, they are more honest. This leads to better documentation of their experiences.

Interview Question 3: Have you ever experienced stigma or emotional challenges such as sadness or depression that affected how regularly you take your ART medication? If yes, can you explain how?

Response of Respondents

IDI Report 3

Participants explained that they sometimes avoid taking drugs in public for fear that others may suspect they are HIV-positive. This leads to delayed doses, skipped doses, and hiding medication. Many respondents expressed feelings of shame, self-blame, and reduced self-worth. These emotional struggles made them less motivated to take ART consistently. Some participants recounted being judged, discriminated against, and treated differently by family or neighbors. These experiences increased emotional distress and disrupted adherence.

Several respondents shared that periods of depression or sadness made it difficult to remember or care about taking medication. Symptoms included hopelessness, fatigue, and lack of interest in self-care. Participants described constant worry about: their future, their health, and workplace discrimination. Stress caused forgetfulness and reduced consistency with ART. Some reported emotional distress linked to medication side effects such as headaches, nausea, or dizziness. These experiences created anxiety and avoidance,

leading to poor adherence.

Participants who lacked emotional support often felt alone, resulting in inconsistent medication use, feelings of abandonment, and reluctance to continue treatment. Some noted that when no one checks on them or encourages medication use, they feel less motivated to remain adherent. Patients shared that emotional and stigma-related pressures eased when they attended support groups where others shared similar experiences. This improved adherence. Some turned to prayer or religious communities for strength, which helped them, remain consistent with ART. Participants who received regular counselling reported better emotional stability and improved adherence.

Interview Question 4: In what ways has support or lack of support from family, friends, or community influenced your ability to adhere to ART?

Response of Respondents

IDI Report 4

Participants shared that supportive family members encourage them to take medication, check on them regularly, and provide reassurance and emotional strength. This motivation increases adherence and reduces fear or shame associated with HIV. Respondents mentioned that family members sometimes remind them of medication times, help with transport to clinic visits, and assist in organizing medication schedules. Such practical support improves consistency in ART use. Some participants noted that family members provide money for transport to clinic, food to take medication properly, and general wellbeing. This financial assistance supports stable adherence.

Friends especially other ART patients provide motivation, share experiences, and remind each other about appointments. Participants reported that friends often share tips for managing side effects, strategies for remembering doses, and emotional support during difficult times. This informal peer education improves adherence. Having supportive friends helps patients feel “normal,” reducing anxiety, shame, and depression factors linked to non-adherence.

Participants who lack family or social support frequently experience sadness, hopelessness, and low motivation to maintain ART routines. This leads to missed doses or poor adherence. Some respondents expressed that the absence of support makes them feel isolated, abandoned and overwhelmed. This emotional burden interferes with the discipline required for long-term ART adherence. Without someone to check on them, participants admitted to forgetting doses, failing to attend clinic appointments, and delaying refills. This creates patterns of inconsistent adherence.

Respondents noted that fear of community stigma leads to hiding medication, avoiding taking drugs in public and skipping doses when people are around. This environment discourages open adherence. Many participants stated that they avoid talking to community members because they fear gossip, fear being judged, and fear being labelled. This reduces opportunities for support and counselling. A few respondents mentioned community-based groups or NGOs that provide education, offer counselling, empower patients. These supportive groups strengthen adherence.

Interview Question 5: Can you describe any counselling or educational sessions you have received at UPTH and how they have helped (or not helped) you adhere to your medication?

Response of Respondents

IDI Report 5

Participants stated that counselling sessions helped them understand how ART works, why adherence is important, and the risks of missed doses. This knowledge empowered them to take their medication more consistently. Many respondents reported that counsellors provided emotional encouragement, hope for living a normal life, and reassurance about treatment effectiveness. This motivational support strengthened their commitment to adherence. Educational sessions were described as helpful for teaching

strategies for remembering doses, ways to cope with side effects, and how to organize medication schedules. Such guidance made adherence easier and more manageable.

Respondents noted that counseling reduced internalized shame, helped them cope with stigma, and built confidence in taking medication openly or discreetly. This emotional relief improved adherence. Some participants described counselling sessions as therapeutic, helping them talk through their challenges, manage depression, reduce stress related to their diagnosis. These psychological improvements translated into better adherence.

Participants expressed that counselling is not always consistent. Some mentioned long gaps between sessions, no follow-up counseling and only initial counselling at diagnosis. This reduces the long-term impact on adherence. Some patients felt counseling was rushed, lacked depth, and focused on general information rather than their personal struggles. As a result, the sessions did not fully address their adherence challenges. A few respondents noted that counselling areas were sometimes open or not private, making it hard to discuss sensitive issues. This reduced their willingness to speak honestly, limiting the benefit of counselling.

Participants suggested that counselling should be regular, personalized to individual challenges, and more interactive. Some respondents felt that family members should be educated to reduce stigma, provide reminders, and support adherence efforts. Patients recommended more support groups where they can learn from others. Peer educators were seen as relatable sources of guidance.

Interview Question 6: How have support groups or advocacy programmes influenced your motivation or ability to stay consistent with your ART treatment?

Response of Respondents

IDI Report 6

Many participants described support groups as a safe environment where they could express fears, frustrations, and challenges related to living with HIV without fear of judgment. This emotional connection helped reduce feelings of isolation. Participants feel “understood” by others facing similar issues. Sharing experiences reduces anxiety and boosts courage to adhere to treatment. Emotional encouragement from group members helps maintain motivation. “When I listen to others talk about their journey, it makes me feel I'm not alone. It gives me strength to continue my drugs.”

Advocacy programmes provided health education on the importance of adherence, consequences of defaulting, and correct medication practices. Information sessions debunk myths about ART. Patients gain better understanding of side effects and how to manage them. Improved health literacy enhances confidence in medication use. “The advocacy team explained why missing drugs is dangerous. That information changed how I think about taking my drugs.”

DISCUSSION OF FINDINGS

Extent to which Self-reporting and Clinical Records Assess ART Adherence at UPTH

Findings revealed that patients mainly self-report verbally during clinic visits and rely on memory; many admit occasional over-reporting because of fear of judgment. Clinical records (refill dates, viral load, CD4 results) capture objective events (clinic attendance, lab outcomes) but miss day-to-day missed doses and the psychosocial reasons for non-adherence. Combined, self-report + clinical records give a partial picture but each method has limitations.

Self-report is easy and practical, and certain brief validated self-report measures (e.g., visual analogue scale) correlate with viral suppression in many settings but self-report tends to overestimate adherence because of recall error and social-desirability bias. Meta-analyses and empirical studies conclude self-report alone has limited sensitivity to detect non-adherence and should be interpreted cautiously (Cunningham et al., 2019; Bezabhe et al., 2016). Pharmacy refill / clinic-record measures often outperform self-report for predicting virologic outcomes in resource-limited settings, because refill history is an objective proxy for

access and continuity of medication, though it too cannot confirm ingestion (Sangeda; Been et al., 2017). Recent work shows no single adherence measure is perfect: combinations (self-report + refill records + viral load monitoring where available) improve identification of at-risk patients (O'Halloran Leach et al., 2021; Macleod et al., 2022).

Continue routine viral load monitoring (gold standard for treatment outcome) and use refill records as practical, programmatic adherence indicators. Supplement with validated brief self-report tools (e.g., VAS or short 3–4 item recall) but treat self-report as triangulation data, not sole evidence of good adherence. (Cunningham et al., 2019; Been et al., 2017).

In what ways Stigma, Depression and Lack of Social Support Influence ART Adherence at UPTH

Findings revealed that stigma (community and internalized) leads patients to hide medication, skip doses in public, and avoid clinic attendance. Depression and emotional distress reduce motivation and routine maintenance (forgetfulness, apathy). Lack of family/friend/community support removes reminders, practical help (transport/food), and emotional encouragement all associated with missed doses.

Large bodies of evidence show psychosocial factors (stigma, depression, low social support) are significant predictors of non-adherence across SSA and Nigeria specifically. Depression impairs motivation and cognitive functioning needed for daily pill taking; stigma causes concealment and treatment interruption; social support is protective (Nutor et al., 2023; George et al., 2019; Babalola et al., 2023). Studies from Nigeria and similar contexts find that social support and disclosure are correlated with higher adherence, while stigma and untreated depression are associated with poorer adherence and worse virologic outcomes (Monjok et al., 2010; research syntheses).

Addressing adherence requires screening and managing mental-health and stigma issues as core components of HIV care, not optional extras. WHO guidance recommends integrating mental-health and adherence support into HIV service delivery and using intensified psychosocial support (e.g., Enhanced Adherence Counselling) for those with unsuppressed viral load (WHO, 2021).

Role of Advocacy, Counselling and Support Groups in Supporting ART Adherence at UPTH

Findings revealed that counselling and educational sessions increased patient knowledge, motivation and coping skills; when regular and private they improved adherence. Support groups and advocacy programmes provided emotional belonging, practical tips, role models, and reduced internalized stigma all motivating adherence. Patients said rushed or infrequent counselling and lack of privacy limit effectiveness.

Systematic reviews and RCT meta-analyses show psychosocial counselling and social-support interventions produce small-to-moderate improvements in adherence and can contribute to viral suppression when combined with structural supports (Simoni et al./meta-analyses; Musayón-Oblitas et al., 2018). Enhanced Adherence Counselling (EAC) and structured support-group participation are associated with improved re-suppression of viral load among patients with detectable viremia in several SSA programmes the combination of EAC + support groups can have synergistic effects (Bvochora et al., 2019; studies from Cameroon/Yaoundé).

Counselling and support groups are effective components of a facility-level adherence strategy, especially when regular, structured, individualized, confidential, and linked to follow-up (EAC model) (WHO, 2021; Bvochora et al., 2019).

CONCLUSION

The study examined HIV/AIDS treatment adherence enhancement and the role of medical social work interventions among patients at the University of Port Harcourt Teaching Hospital (UPTH), Rivers State. Findings revealed that while self-reporting is easy to administer, it is prone to recall bias and over-reporting due to social desirability. Clinical records (refill histories and viral load monitoring) provided objective but incomplete data,

missing nuances of day-to-day adherence behavior. Triangulating self-report and clinical records gives a more accurate assessment. Participants reported that internalized and external stigma, depression, and absence of emotional or practical social support negatively affected adherence. These psychosocial barriers led to skipped doses, missed appointments, and low motivation to follow treatment protocols. Counselling and educational sessions enhanced patients' knowledge, motivation, and coping mechanisms. Support groups and advocacy programs offered emotional belonging, practical adherence strategies, role models, and reduction of internalized stigma. Effectiveness was limited where counselling was irregular, rushed, or lacked privacy.

RECOMMENDATIONS

Based on the findings of the study the following are recommended

Medical social workers at UPTH should provide regular, personalized, and structured counselling sessions for HIV/AIDS patients. Counselling should include education on ART adherence, side-effect management, coping strategies for emotional challenges, and motivation reinforcement. Sessions should ensure privacy and confidentiality to encourage open discussion and reduce the impact of stigma.

UPTH should institutionalize peer-led support groups and advocacy programs to foster emotional support, motivation, and shared learning among patients. Support groups should provide mentorship, share adherence strategies, and reduce feelings of isolation and internalized stigma.

Social workers should coordinate transport assistance, food support, or linkage to community resources for patients facing economic challenges. Implement follow-up interventions such as phone calls, SMS reminders, or home visits to monitor adherence and provide timely support.

UPTH should ensure close collaboration between social workers, clinicians, and pharmacists to provide holistic care. Develop a triangulated adherence assessment system using self-report, clinical records, and viral load monitoring, with social workers interpreting psychosocial factors alongside clinical data.

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