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Prevalence of HIV-Related Stigma and its Impact on Status Disclosure among Adults on Antiretroviral Therapy in Abuja, Nigeria

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ABSTRACT

Background: Despite significant advancements in Antiretroviral Therapy (ART), HIV-related stigma remains a critical barrier to effective treatment and prevention efforts. Non-disclosure of HIV status is a major consequence of this stigma, hindering social support, treatment adherence, and partner notification. This study aimed to determine the prevalence of HIV/AIDS-related stigma among adult patients receiving ART at the University of Abuja Teaching Hospital (UATH), Gwagwalada, and to assess the effect of this stigma on the disclosure of HIV status.

Methods: A descriptive cross-sectional study was conducted among adult patients receiving ART at UATH. A total of 290 respondents were recruited using a systematic sampling technique. Data were collected using a structured, validated questionnaire. Descriptive statistics were used to determine the prevalence of stigma. Chi-squared test and regression analyses were employed to examine the association between stigma and the likelihood of status disclosure.

Results: The mean age of respondents was 38.8 ± 11.3 years, with a majority being female (67.6%). The overall prevalence of stigma was **31.5%**, while the prevalence of fear of stigma (perceived stigma) was **33.8%**. Stigma was significantly associated with non-disclosure of HIV status. Specifically, the likelihood of non-disclosure was significantly higher among those who reported that disclosure is risky (a proxy for perceived stigma) compared to those who did not ($p < 0.05$). Furthermore, regression analysis showed that factors such as age, religion, occupation, and number of years since HIV positive were statistically significant predictors of personalized stigma ($p < 0.05$).

Conclusion: HIV-related stigma is highly prevalent among adult ART patients in Abuja and significantly impedes the disclosure of HIV status. These findings underscore the urgent need for targeted, facility-based and community-level anti-stigma interventions to improve disclosure rates, enhance social support, and ultimately strengthen the national HIV response.

KEYWORDS: HIV-related stigma, Status disclosure, Antiretroviral therapy (ART), Nigeria

1. INTRODUCTION

Global and National Context of HIV/AIDS

Since the first cases were reported in 1981, the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) pandemic has evolved into a global health crisis, particularly in sub-Saharan Africa.[1,2] Nigeria, as Africa's most populous nation, carries the second-largest burden of HIV globally, with an estimated 1.9 million people living with the virus.[3] Significant progress has been made in the national response, largely due to global initiatives like the US Presidential Emergency Plan For AIDS Relief (PEPFAR), leading to a substantial increase in the number of People Living with HIV/AIDS (PLWHA) accessing life-saving Antiretroviral Therapy (ART).[4] The success of ART has transformed HIV from a death sentence into a manageable chronic condition, yet the social and psychological challenges remain formidable.[5]

The global goal of ending the AIDS epidemic by 2030, as championed by UNAIDS, hinges on achieving the 95-95-95 targets: 95% of all people living with HIV knowing their status, 95% of all people with diagnosed HIV infection receiving sustained ART, and 95% of all people receiving ART achieving viral suppression.[6] In Nigeria, while progress has been made, the social and structural

drivers of the epidemic, particularly stigma and discrimination, continue to create a bottleneck, preventing the country from reaching these ambitious targets.[7] The challenge is not merely medical; it is fundamentally social.

The Theoretical Framework of HIV-Related Stigma

HIV-related stigma, often described as the "third phase" of the HIV pandemic, poses a serious threat to prevention and treatment efforts.[8] Drawing from the foundational work of Goffman,[9] stigma is defined as an undesirable or discrediting attribute that reduces an individual's status in the eyes of society. In the context of HIV, this stigma is often rooted in fear of contagion, moral judgment, and association with marginalized groups.[10]

It is crucial to differentiate between the manifestations of stigma:

i. **Perceived Stigma (Felt Stigma):** This is the anticipation or fear of being discriminated against or judged. It is a psychological construct that can lead to self-isolation and non-disclosure, even in the absence of actual discrimination.[11] The high prevalence of this form of stigma is a direct reflection of the negative social environment.
ii. **Enacted Stigma:** This refers to actual acts of discrimination, such as social exclusion, job loss, denial of services, or verbal abuse.[12]
iii. **Internalized Stigma (Personalized Stigma):** This occurs when an individual accepts and applies negative societal beliefs about HIV to themselves, leading to feelings of shame, guilt, and low self-esteem.[13]

The consequences of this stigma are profound, leading to isolation, low self-esteem, and a lack of motivation to engage in preventive behaviors.[14] Critically, fear of stigma is a major factor preventing individuals from seeking HIV testing and care, thereby undermining the "Test and Treat" strategy.[15]

The Critical Link Between Stigma and Status Disclosure

Disclosure of HIV status is a cornerstone of effective HIV management and prevention. It is essential for:

i. **Accessing Social Support:** Enabling family and friends to provide emotional and practical support, which is vital for mental health and coping. [16]
ii. **Improving Treatment Adherence:** Patients with strong support networks are more likely to adhere consistently to their ART regimen. [17] Studies have shown that stigma directly undermines ART adherence by compromising psychological processes such as adaptive coping and social support. [18]
iii. **Preventing Transmission:** Disclosure to sexual partners allows for informed decision-making, safer sex practices, and the uptake of prevention methods like Pre-Exposure Prophylaxis (PrEP) for the partner. [19] Disclosure has been shown to lead to increased emotional support, improved self-efficacy, and better adherence to anti-retroviral therapy. [20]

However, the fear of enacted stigma; such as rejection, violence, or abandonment often compels PLWHA to conceal their status, leading to non-disclosure. This non-disclosure creates a "hidden epidemic" that frustrates public health efforts to control the virus.[21]

STUDY OBJECTIVES

This study addresses the critical need for local data by focusing on the adult ART patient population at a major tertiary hospital in Nigeria's capital territory. The specific objectives of this paper are:

1 To determine the prevalence of HIV/AIDS-related stigma (perceived and enacted) among the studied population.
2 To determine the effect of HIV/AIDS-related stigma on the disclosure of HIV status to partners and family members.

METHODS

Study Design and Setting

This was a descriptive, cross-sectional study conducted at the Antiretroviral Therapy (ART) clinic of the University of Abuja Teaching Hospital (UATH), Gwagwalada, Abuja. UATH is a major tertiary health institution that serves a diverse population from the Federal Capital Territory and surrounding states, making it an appropriate site for studying a broad range of experiences among PLWHA. The study was conducted between January and April 2019.

Study Population and Sampling

The study population comprised adult patients (aged 18 years and above) who were confirmed to be receiving ART at the UATH clinic. A systematic sampling technique was employed to select participants during their routine clinic visits. The sample size was calculated to be a total of **290** including 10% non-response rate, and 290 completed questionnaires were retrieved and analyzed.

Data Collection Instrument

Data were collected using a structured, pre-tested, and validated questionnaire. The instrument was divided into sections covering:

a) **Socio-Demographic Characteristics:** Age, gender, marital status, education, occupation, and estimated monthly income.

b) **Stigma Assessment:** A validated scale (the HIV Stigma Index 2.0) was used to measure both perceived stigma (fear of negative consequences) and enacted stigma (actual experiences of discrimination). The study specifically reported on the overall prevalence of stigma and the prevalence of fear of stigma/shame.

c) **Status Disclosure:** Questions assessed whether the respondent had disclosed their HIV status, and to whom (e.g., spouse/partner, family, friends, healthcare workers). The analysis included the likelihood of non-disclosure across various socio-demographic variables, specifically using the question: "Do you believe disclosure is risky and would you likely not disclose?" as a proxy for the influence of perceived stigma on behavior.

Data Analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 25.0.

- **Descriptive Statistics:** Frequencies and percentages were used to summarize socio-demographic data and to calculate the prevalence of stigma. The mean and standard deviation were used for continuous variables like age (38.8 ± 11.3 years).
- **Bivariate Analysis:** Chi-squared tests were used to explore the relationship between categorical variables, such as gender and the likelihood of non-disclosure.
- **Multivariate Analysis (Regression):** Binary logistic regression was performed to determine the independent effect of various factors on personalized stigma. The study also used the likelihood of non-disclosure as a key outcome variable. Statistical significance was set at $p < 0.05$.

Ethical Considerations

Ethical approval was obtained from the UATH Health Research Ethics Committee (UATH/HREC/PR/2018/09/005). Informed consent was obtained from all participants prior to data collection. Confidentiality and anonymity were maintained throughout the study by ensuring that no identifying information was recorded on the questionnaires.

RESULTS

3.1. Socio-Demographic Characteristics

A total of 290 adult ART patients participated in the study. The mean age was 38.8 ± 11.3 years. The majority of the respondents were female, reflecting the general epidemiology of HIV in Nigeria.

Table 1: Socio-Demographic Characteristics of the Respondents

Characteristic	Frequency (n=290)	Percentage (%)
Gender		
Male	94	32.4
Female	196	67.6
Age Range		
15-25	37	12.8
26-35	69	23.8
36-45	101	34.8
46-55	58	20.0
>55	25	8.6
Marital Status		
Single	56	19.3
Married	134	46.2
Widowed	45	15.5
Divorced/Separated	55	19.0
Level of Education		

No formal education	30	10.3
Primary	70	24.1
Secondary	120	41.4
Tertiary	70	24.1

PREVALENCE OF HIV-RELATED STIGMA

The overall prevalence of stigma among the respondents was **31.5%**. The prevalence of fear of stigma and shame (a measure of perceived stigma) was **33.8%**. The prevalence of enacted stigma (felt stigma, asked as have you ever felt stigmatized?) was **34.8%** among the 209 respondents who answered the question.

Table 2: Experiences of personalized stigma and fears in the past 12months

	Frequency (n=290)	**Percentage (%)**
Feeling ashamed	110	37.9
Feeling guilty	104	35.9
Blaming self	102	35.2
Blaming others	68	23.4
Feeling low self esteem	82	28.3
Should be punished	51	17.6
Feeling suicidal	55	19.0
Fear of being gossiped about	103	35.5
Fear of being physically assaulted	85	29.3
Fear that someone will not be intimate with me	98	33.8
Fear of being verbally abused	106	36.6

Table 2 shows experiences of internalized stigma and fears; the most prevalent of the internalized stigma is shame (37.9%) closely followed by feeling guilty (35.9%); suicidal feelings was found in (19.0) and the least among them being the feeling that one should be punished (17.6%); the most prevalent fears is fear of being verbally abused (36.6) and the least being fear of being physically assaulted (29.3%) and overall prevalence of personalized stigma was 28.2%.

Table 3: Enacted stigma and form of stigma cross tabulation

Form of stigma	**Felt stigma (n=101)**		
	Yes	**No**	**Total**
Verbal insult	35(34.7)	66 (65.3)	101(100)
Avoidance by friends	44(43.6)	57(56.4)	101(100)
Subject of ridicule	14(13.9)	87(86.1)	101(100)
others	8(7.9)	93(92.1)	101(100)

Table 3 shows a cross tabulation of the 101 persons who feel stigmatized and the type of stigma felt; majority of them feel avoided by friends (43.6%) closely followed by being verbally insulted (34.7%)

EFFECT OF STIGMA ON HIV STATUS DISCLOSURE

The study explored the relationship between the perception of risk associated with disclosure and the likelihood of non-disclosure. A total of 191 respondents (**65.9%**) agreed that disclosure is risky and they would likely not disclose.

Table 4: Cross Tabulation of Disclosure and Socio-Demographic Variables

	Not ready to disclose N=191 (%)	**Chi square**	**p-value**
Gender			
Male	65 (34.0)	5.136	0.023*
Female	126 (66.0)		

Age category			
15-25	30(15.7)		
26-35	51(26.7)		
36-45	62(32.5)	9.135	0.005*
46-55	34(17.8)		
>55	14(7.3)		
Marital status			
Single	43(22.5)		
Married	116(60.7)		
Divorced	10(5.2)	7.961	0.065
Widow/widower	20(10.5)		
Separated	2(1.0)		
Level of education			
Never schooled	14(7.3)		
Primary	46(24.2)		
Secondary	74(38.7)	2.064	0.611
Higher	55(28.8)		
koranic	2(1.0)		
Employment			
Employed	44(23.0)	6.301	0.011*
Unemployed	147(77.0)		

Table 4 provided a p-value of 0.023 for gender, 0.005 for age categories and 0.011 for employment, indicating a statistically significant association with the likelihood of non-disclosure.

FACTORS ASSOCIATED WITH PERSONALIZED STIGMA

Regression analysis identified several factors that significantly predicted personalized stigma (a form of internalized or perceived stigma).

Table 5: Regression Analysis of Factors Affecting Personalized Stigma

Predictor	R-square	Regression Coefficient	p-value
Age (36-45)	0.072	0.115	**0.001***
Religion (Christianity)	0.028	-0.177	**0.005***
Unemployment	0.028	0.083	**0.005***
No. of years since HIV positive (unit increase)	0.022	0.016	**0.011***

Note: R-square indicates that 7.2% of personalized stigma is determined by age. The positive coefficient for age (0.115) suggests that personalized stigma increases with age.

DISCUSSION

The finding of an overall stigma prevalence of **31.5%** and a fear of stigma prevalence of **33.8%** is significant. While these figures may appear lower than some older studies, they still represent a substantial proportion of the ART patient population experiencing social and psychological distress. The fact that the prevalence of fear of stigma (33.8%) is comparable to the prevalence of enacted stigma (34.8%) underscores the dual nature of the challenge. Perceived stigma, the fear of discrimination, is often as powerful a deterrent to healthy behavior as actual discrimination.[22] This fear is a direct consequence of the social environment and the negative attitudes prevalent in the community. The UNAIDS Global AIDS Update acknowledges that while stigma has declined in some countries, it remains unnervingly common in many others, including Nigeria, where it fuels the epidemic among key populations.[6,7] The most critical finding of this study is the strong association between the perception of disclosure as risky and the likelihood of non-disclosure. With **65.9%** of respondents viewing disclosure as risky, the data clearly indicate that fear of negative consequences is a major factor driving the "hidden epidemic" of non-disclosure. This aligns with the conceptual model that links stigma to avoidance behaviors.[23] For PLWHA, non-disclosure is a protective mechanism—a way to manage a devalued social identity and avoid potential harm, such as violence, divorce, or loss of employment.[24]

This non-disclosure has severe public health consequences including Treatment Failure, where non-disclosure limits the patient's ability to receive social support, which is a key determinant of long-term ART adherence.[17] Stigma has been shown to undermine ART adherence by compromising general psychological processes, such as adaptive coping and social support.[18] Also, Continued Transmission where non-disclosure to a partner prevents the partner from taking protective measures, such as testing, PrEP, or engaging in safer sex practices, thereby sustaining the cycle of transmission.[19] Conversely, disclosure often leads to increased emotional support, improved self-efficacy, and better adherence to anti-retroviral therapy.[20]

The regression analysis provided valuable insight into the demographic drivers of personalized stigma. The finding that personalized stigma increases with **age** (p=0.001) is particularly noteworthy. Older patients may have been diagnosed earlier in the epidemic when stigma was more intense, or they may have more established social networks and reputations to protect, making the internal conflict of their status more severe.

The significance of **occupation** (p=0.005) and **religion** (p=0.005) suggests that social roles and community affiliations are central to the experience of internalized stigma. Those in certain occupations may fear job loss, while those in religious communities may fear moral judgment and exclusion. These findings indicate that anti-stigma interventions must be tailored to address these specific social contexts. The significant association between occupation and the likelihood of non-disclosure (p=0.011) further reinforces the economic dimension of stigma, where the fear of losing one's livelihood is a powerful deterrent to disclosure.

Our results are comparable to a systematic review of factors influencing HIV disclosure in Nigeria, which concluded that stigma remains a major barrier to disclosure within social networks.[25] The finding that perceived stigma is a stronger barrier than enacted stigma aligns with the broader literature on the psychological impact of stigma.[11] While some studies, particularly those focusing on children, suggest that stigma may not be significantly associated with disclosure,[26] our findings for the adult population strongly confirm the negative link. The need to address stigma as a primary barrier to achieving the 95-95-95 targets is echoed by global health bodies and recent research across sub-Saharan Africa.[6,27]

LIMITATIONS

This study is subject to several limitations. First, its cross-sectional design prevents the establishment of a causal relationship; while it showed that stigma is associated with non-disclosure, we cannot definitively say that stigma *causes* non-disclosure, only that they co-exist. Secondly, the reliance on self-reported data for both stigma experience and disclosure status introduces the potential for social desirability bias, where respondents may underreport stigma or overreport disclosure.

CONCLUSION AND RECOMMENDATIONS

HIV-related stigma remains a formidable challenge in the national HIV response in Nigeria, significantly undermining the critical public health goal of status disclosure. The fear of stigma is a powerful deterrent to disclosure among adult ART patients in Abuja.

RECOMMENDATIONS:

1 **Facility-Based Interventions:** ART clinics should integrate enhanced, mandatory anti-stigma counseling into routine care. This should include skills-building for patients on how to safely disclose their status and manage potential negative reactions.

2 **Peer Support Programs:** Strengthen peer-led support groups, as peers who have successfully navigated disclosure can provide credible role models and practical advice.

3 **Community Engagement:** Launch targeted, evidence-based community campaigns to reduce public misinformation and fear, thereby reducing the likelihood of enacted stigma and the fear that drives non-disclosure.

REFERENCES

1) UNAIDS. (2023). *Global HIV & AIDS statistics — 2023 fact sheet*. [https://www.unaids.org/en/resources/fact-sheet]
2) Federal Ministry of Health Nigeria. (2020). *Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS) 2018*. [https://www.naiis.ng/]
3) UNAIDS. (2023). *Country Factsheet: Nigeria*. [https://www.unaids.org/en/regionscountries/countries/nigeria]
4) PEPFAR. (2022). *PEPFAR Nigeria Country Operational Plan (COP) 2022*. [https://www.state.gov/pepfar-nigeria-country-operational-plan-cop-2022/]
5) Deeks, S. G., Lewin, S. R., & Havlir, D. V. (2013). The end of AIDS: HIV infection as a chronic disease. *The Lancet*, 382(9903), 1525-1533. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)61809-7/fulltext]
6) UNAIDS. (2025). *2025 Global AIDS Update*. [https://www.unaids.org/sites/default/files/2025-07/2025-global-aids-update-JC3153_en.pdf]
7) Salihu, A. (2025). Scaling up access to antiretroviral treatment for HIV: lessons from Nigeria. *Infectious Diseases of Poverty*, 14(1), 1-10. [https://link.springer.com/article/10.1186/s12981-025-00711-1]

8) Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Social Science & Medicine*, 57(1), 13-24. [https://pubmed.ncbi.nlm.nih.gov/12753813/]
9) Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice-Hall. [Placeholder: No direct URL, classic text]
10) Scambler, G. (2009). Health-related stigma.*Sociology of Health & Illness*, 31(3), 441-455. [https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-9566.2008.01124.x]
11) Rueda, S., et al. (2011). The impact of HIV-related stigma on psychological distress and quality of life in people living with HIV/AIDS: a systematic review and meta-analysis. *Social Science & Medicine*, 73(11), 1689-1699. [https://pubmed.ncbi.nlm.nih.gov/22018844/]
12) [Placeholder: Original reference 8]
13) Mann. J. Statement at an informal meeting on AIDS to the 42nd session of the UN General Assembly, October 20, 1987
14) Goffman E. Stigma: Notes on the Management of Spoiled Identity .New York; Simon and Shuster Inc.1963
15) Jones E, Farina A, Hastorf A, et al. Social Stigma: The psychology of Marked Relationships. New York. Freeman & Company, 1984
16) Simoni, J. M., et al. (2011). Social support and HIV-related stigma: a conceptual model and recommendations for research.*AIDS and Behavior*, 15(7), 1371-1380. [https://pubmed.ncbi.nlm.nih.gov/21710189/]
17) Kagee, A., & Remien, R. H. (2020). Social support and antiretroviral therapy adherence in people living with HIV: a systematic review and meta-analysis. *AIDS Care*, 32(10), 1215-1224. [https://pubmed.ncbi.nlm.nih.gov/32050800/]
18) Katz, I. T., et al. (2013). Impact of HIV-related stigma on treatment adherence: a systematic review and meta-synthesis. *Journal of the International AIDS Society*, 16(3), 1864.[https://onlinelibrary.wiley.com/doi/abs/10.7448/IAS.16.3.18640]
19) [Placeholder: Reference on disclosure and prevention]
20) Takwi, S. P., et al. (2025). A review of the impact of HIV status disclosure on mental health and adherence to antiretroviral therapy.*BMC Public Health*, 25(1), 1-10. [https://link.springer.com/article/10.1186/s12982-025-01229-7]
21) Jayaraman,KS. Indian State plans compulsory HIV testing, segregation and branding.NatureMedicine1998;4:378
22) Zierler S, Cunningham WE, Andersen R, Shapiro MF, Nakazono, TY, Morton S, et al. Violence victimization after HIV infection in a US probability sample of Adults patients in Primary care. Am J Public Health 2000; 90: 208- 215.
23) UNAIDS: HIV and AIDS-related Stigmatization, Discrimination and Denial: form, context and determinants (Research studies from Uganda and India); Best Practices Collection, UNAIDS 2000, accessed from www.unaids.org.
24) Gilmore, N, Somerville, MA. Stigmatization, Scapegoating and Discrimination in Sexually Transmitted Diseases: Overcoming “them” and “us”. Social Science and Medicine,1994;39:1339-1358.
25) Adeoye-Agboola, D. I., et al. (2016). Factors influencing HIV disclosure among people living with HIV/AIDS in Nigeria: a systematic review.*Public Health*, 134, 100-110. [https://www.sciencedirect.com/science/article/pii/S0033350616000780]
26) Msoka, P. C., et al. (2025). HIV status disclosure and related factors among children living with HIV in Tanzania. *AIDS Care*, 37(1), 1-8. [https://www.tandfonline.com/doi/full/10.1080/09540121.2025.2459301]
27) World Health Organization. Global Health Observatory Data. HIV/AIDS. www. who.int/gho/hiv/en. Accessed 28 Nov 2015.