

# Knowledge, Stigma, And Human Rights: Assessing ART Service Experiences Of HIV Positive Individuals In Ondo State

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## Abstract:

**Background:** One of the Millennium Development Goals' accomplishments was objective 6A, which intended to prevent and reverse the spread of HIV by 2015. As of 2014, the number of new HIV infections and AIDS-related deaths have decreased by 40% and 42%, respectively. The main causes of infection in Nigeria are poor risk perception, concurrent sexual engagements, and insufficient access to appropriate healthcare services. At the heart of this is the difficulty of HIV stigma and prejudice, which are a fundamental barrier impeding the national response to the epidemic. This study aims to assess the knowledge of ART services and the level of stigma and discrimination and human right violation experiences among HIV positive individuals enrolled in ART clinics in Ondo State.

**Materials and Methods:** This study made use of a cross sectional descriptive design involving 432 HIV patients who attending four ART clinics in Ondo State.

**Results:** Results showed that knowledge on HIV and ART services was high as more than two third 400 (93%) knew about unprotected sexual intercourse, blood transfusion, and mother to child transmission. Stigmatization was also prevalent but there was no association between knowledge and stigmatization.

**Conclusion:** This study concluded that PLWHA suffer from the burden of HIV-related stigma at a lower level. Robust intervention is needed in the implementation of stigma reduction programs as well as dissemination of information and empowerment.

**Key Word:** ART Services; Experiences; HIV/AIDS; Knowledge; Stigma.

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## I. Introduction

One of the Millennium Development Goals' accomplishments was objective 6A, which intended to prevent and reverse the spread of HIV by 2015. As of 2014, the number of new HIV infections and deaths from AIDS had decreased by 40% and 42%, respectively [1]. Despite the fact that Sub-Saharan Africa is home to 70.0% of HIV-positive people worldwide, the region has lagged behind in this achievement. Meanwhile, recent statistics suggest that 36.7 million people were living with HIV as of the end of 2015, with approximately 46% having access to treatment [2]. Nigeria has the second greatest population, with 3.8 million and an adult prevalence of 3.1% [3]. About 44% of HIV-positive individuals and children receive access to ART based on a Criteria CD4 level of 350 cells/mm<sup>3</sup>. HIV epidemiology in Nigeria suggests that infections are greater among women, and prevalence varies among the six geopolitical zones, with the highest rate in the South-South [3].

At the heart of these issues is the difficulty of HIV stigma and prejudice, which is a key impediment to the national response to the epidemic. According to [4] terminology guidelines, stigma refers to ideas and/or attitudes that mark or taint a person or group of people as worthless or discreditable. Discrimination arises from stigma when any sort of differentiation, exclusion, or restriction is applied to an individual because of an attribute or personal characteristic. HIV-related stigma is defined as "negative beliefs, feelings, and attitudes towards people living with HIV (PLHIV), groups associated with PLHIV, and other key populations at higher risk of HIV infection" for operational and programmatic purposes. HIV-related discrimination is the "unfair and unjust treatment (act or omission) of an individual based on his or her real or perceived HIV status." Stigma and discrimination are formidable threats to the success of HIV care and treatment programs [5]. The current study aims to assess the knowledge of ART services and the level of stigma and discrimination and human right violation experiences among HIV positive individuals enrolled in ART clinics in Ondo State.

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## II. Material And Methods

This study was carried out on HIV positive individuals enrolled into supported ART and PMTCT sites in Ondo State. A total of 432 adult subjects (both male and females) were used for this study.

**Study Design:** The study utilized a cross-sectional descriptive study design

**Study Location:** The study was conducted in Ondo State, Nigeria, which is located in the country's south-west geopolitical zone. Ondo State was formed in 1976 from the defunct Western State and now comprises 18 Local Government Areas. It is primarily inhabited by Yorubas who speak several dialects of the language, such as Akoko, Akure, Apori, Idanre, Ijaro, Ikale, Ilaje, Ondo, and Owo, Ondo State, which is certainly a microcosm of the Nigerian nation. The study utilized a cross-sectional descriptive study design.

**Study Duration:** June 2020 to November 2020.

**Sample size:** 432 HIV patients.

**Sample size calculation:** The sample size was estimated using Cochran formula. The target population from which we randomly selected our sample was considered over 1000. We assumed that the confidence interval of 10% and confidence level of 95%. The sample size actually obtained for this study was Approximately 432 participants.

**Subjects & selection method:** For this study, a multistage sampling technique was used.

First stage: The list of all facilities where HIV positive clients are supported on treatment (doing ART and PMTCT) within Ondo State was obtained. 4 facilities were selected by simple random sampling. The four facilities selected with estimated clients per clinic visitation on monthly basis are listed in table 1 below:

**Table 1: Facilities and their average number of clients**

S/No	Name of facilities	Average number of clients	Sample Size
1	HIV/AIDS Antiretroviral Therapy Centre, State Hospital, Ondo	400	146
2	University of Medical Science Teaching Hospital, Ondo	320	116
3	Comprehensive Health Centre, Mofere, Ondo	240	87
4	State Hospital, Ile-Oluji, Ondo	200	73
	Total	1160	432

### Inclusion criteria:

1. Patients living with HIV/AIDS (PLWHA)
2. Either sex
3. Patients attending any of the considered facilities where ART treatment is done in Ondo State

### Exclusion criteria:

1. Pregnant women
2. Patients who do not consent to participate in the study
3. Patients who do not attend of the above ART clinics
4. Patients with a history of drug or alcohol abuse.

### Procedure methodology

After written informed consent was obtained, a well-designed questionnaire was used to collect the data of the recruited patients. The questionnaire included socio-demographic characteristics such as age, gender, nationality, religion, ethnicity, years of living with HIV/AIDS and lifestyle habits like smoking and alcohol and statin prescribed for at least 2 years continuously and Questions to test their level of knowledge on HIV/AIDS and ART Service delivery.

The respondents experience on stigma and discrimination, and the reason for stigma and discrimination were captured in the questionnaire.

An informed consent form was utilized where respondents had the liberty to participate or refrain from participation in the study. Those who agreed to participate were assured of the highest level of confidentiality and their data protected

**Statistical analysis**

Data was analyzed using SPSS version 23. Frequency distribution tables, charts and graphs were generated from variables while cross tabulation and test statistics were done where applicable. Chi square was used to compare rates, ratios and proportions while fishers' exact test was used when cells had expected values less than 5. Level of significance will be set with p-value less than 0.05.

**III. Result**

Of 432 respondents majority 272 (63%) are females, within age range 26-36 years i.e 226 (52.3%), 194 (44.9%) were married and currently living with the husband, 228 (52.8%) had tertiary education, 226 (52.3%) in full time employment while 322(74.5%) were Christians, 307 (71.1%) Yoruba while 235 (54.4%) had been living with HIV/AIDs between 1-5 years according to table 1 below

**Table no 1: Socio-Demographic Status (N=432)**

Variable	Frequency	%
<b>Sex</b>		
Male	159	36.8
Female	272	63
Transgender	1	0.2
<b>Age in Categories</b>		
15 – 25	44	10.2
26 – 36	226	52.3
37 – 47	123	28.5
48 – 58	26	6
59 – 69	8	1.9
70 – 80	2	0.5
81 – 91	3	0.7
<b>Marital status</b>		
Single	144	33.3
Married and spouse is currently living in house hold	194	44.9
Married and spouse is working away from the household	37	8.6
In a relationship but not living together	26	6
Divorced /separated	25	5.8
Widow / widower	6	1.4
<b>Educational level</b>		
No formal education	44	10.2
Primary school	82	19
Secondary school	78	18.1
Technical college / university	228	52.8
<b>Employment status</b>		
In full time employment	226	52.3
In part time employment	11	2.5
Self employed (full time)	90	20.8
Self employed (part time)	62	14.4
Not working at all	43	10
<b>Religion</b>		
Christian	322	74.5
Moslem	90	20.8
Traditional	20	4.6
<b>Ethnicity</b>		
Yoruba	307	71.1
Hausa	35	8.1
Igbo	85	19.7
Others Edo, Ijaw	5	1.2
<b>Years of living with HIV/AIDS</b>		
1-5 years	235	54.4
6-10 years	172	39.8
Greater than 10 years	25	5.8

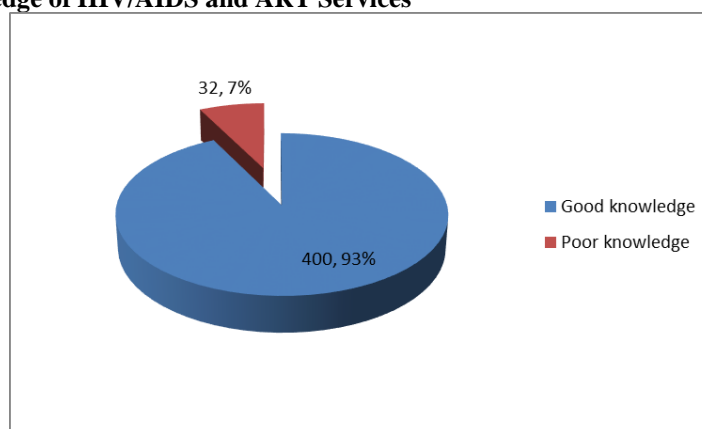
**Knowledge on HIV/AIDS and ART Service Delivery**

In terms of knowledge, 367(85%) knew unprotected sexual intercourse, blood transfusion, mother to child transmission, Injection drug use as mode of transmission of infection while 358(82.9%) knew ART can cure the infection. Also, 289 (66.9%) knew all pregnant women with HIV/AIDs will have children born with AIDS. 411(95.1%) , 397(91.9%), 399 (95.1%) knew ART can reduce the viral load, improves health and functionality of immune system as well as ART is a lifelong treatment respectively according to the table 2 below:

**Table no 2: Knowledge on HIV/AIDS and ART Service Delivery**

Variable	Frequency	%
<b>Unprotected sex, blood transfusion, MTCT and Injection can transmit HIV/AIDS</b>		
Yes	367	85
No	62	14.4
I don't know	3	0.7
<b>Does ART provide cure for HIV/AIDS?</b>		
Yes	358	82.9
No	51	11.8
I don't know	23	5.3
<b>All pregnant women infected will have children born With AIDS.</b>		
Yes	289	66.9
No	130	30.1
I don't know	13	3
<b>It's advisable to take ART only when one feels sick</b>		
Yes	370	85.6
No	59	13.7
I don't Know	3	0.7
<b>Saliva can be a route for transmission of HIV</b>		
Yes	366	84.7
No	60	13.9
I don't Know	6	1.4
<b>ART reduces viral load</b>		
Yes	411	95.1
No	17	3.9
I don't know	4	0.9
<b>Should a person start medication as soon he/she test positive?</b>		
Yes	415	96.1
No	10	2.3
I don't know	7	1.6
<b>ART improves health immune system</b>		
Yes	397	91.9
No	27	6.2
I don't know	8	1.9
<b>Not everyone will need ART</b>		
Yes	315	72.9
No	108	25
Don't know	9	2.1
<b>Once on ART, you take if for life</b>		
Yes	399	92.4
No	26	6
I don't know	7	1.6

**Summarized Knowledge of HIV/AIDS and ART Services**



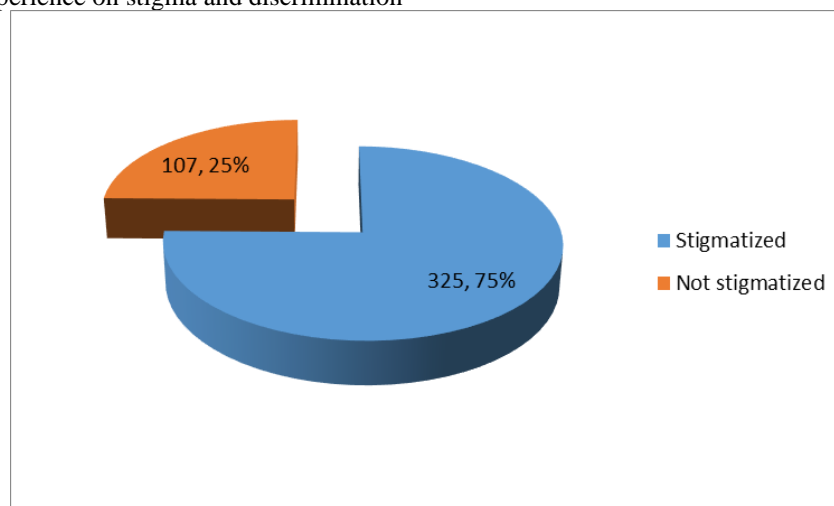
**Respondents Experience on stigma and discrimination**

Concerning experience with stigma and discrimination, 10(2.3%) very often excluded from social gatherings due to HIV/AIDS, 7(1.6%) often excluded from religious activities or places of worship based on your HIV/AIDS status , 7(1.6%) often excluded from family activities or places, 15(3.5%) often physically assaulted or threatened, 15(3.5%) sometimes experienced sexual rejection as a result of positive HIV status, 18( 4.2%) often discriminated against by other people living with HIV/AIDS while 18(4.2%) had wife/husband had been discriminated by household due to HIV status.

**Table no 2:** Respondents Experience on stigma and discrimination

Variable	Not at all	Rarely	Often	Very often
Excluded from social gatherings or activities in the last 12 months	357(82.6%)	11(2.5%)	54(12.5%)	10(2.3%)
Exclusion from religious activities or places of worship	409(94.7%)	11(2.5%)	5(1.2%)	7(1.6%)
Exclusion from family activities or places of worship	409(94.7%)	12(2.8%)	4(0.9%)	7(1.6%)
Been gossip by others due to HIV/AIDS infection	383(88.7%)	14(3.2%)	15(3.5%)	20(4.6%)
In the last 12 months, How long were you verbally insulted / harassed.	385(89.1%)	18(4.2%)	26(6.0%)	10(2.3%)
In the last 12 months, how often were you physically assaulted?	373(86.3%)	18(4.2%)	26(6.0%)	15(3.5%)
In the last 12 months, how often did you experience sexual rejection?	395 (91.4%)	18(4.2%)	15(3.5%)	4(0.9%)
In the last 12 months, how often were you discriminated against by PLW HIV?	389 (90.0%)	11(2.5%)	14(3.2%)	18(4.2%)
In the last 12 months, how often did your spouse experience discrimination as a result of your HIV status?	386 (89.4%)	8(1.9%)	20(4.6%)	18(4.2%)

Summarized experience on stigma and discrimination



**Figure 1:** Respondents summarized experience on stigma and discrimination

Concerning the perceived reasons for stigma and discrimination, out of 432 respondents, 30(6.9%) said people are afraid of getting infected with HIV/AIDS, 32(7.4%) said they don't understand how HIV is transmitted and are scared, 32(7.4%) said it due to false religious beliefs as documented in table 3 below.

**Table no 3: Reason for stigma and discrimination**

Variable	Frequency	Percentage
People are afraid of getting infected with HIV from me	30	6.9
People don't understand how HIV is transmitted and are afraid	32	7.4
People think that having hiv is shameful and they should not be associated with me	39	9
Religious beliefs or "moral" judgements	32	7.4

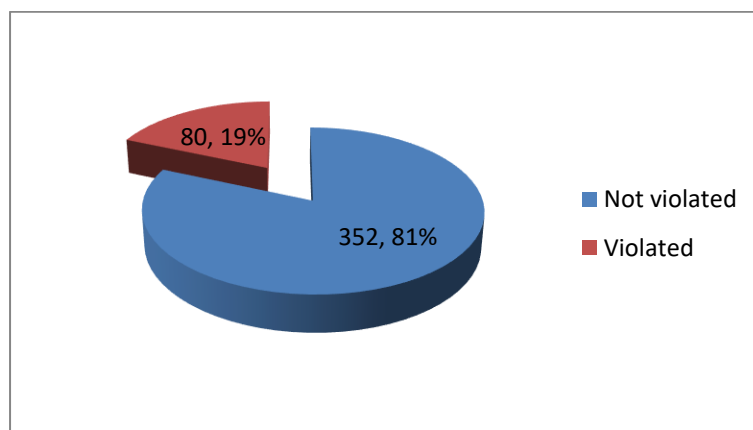
People disapprove of my lifestyle or behaviour	3	0.7
I look sick with symptoms associated with HIV	6	1.4
I don't know	290	67.1

**Respondents experience with human rights violation**

Out of 432 respondents 2(0.5%), 22(2.5%) 15(3.5%), 15(3.5%) 17(3.9%) 11(2.5%) and 29( 6.7%) often have lost his/her job, have you been refused employment, have you been refused promotion, have been suspended or prevented from attending an educational institution, have your child/children been dismissed, suspended or prevented from attending an educational institution, have been denied health services including dental care as well as have you been denied family planning services due to their HIV/AIDS status according to table 4 below.

**Table no 4: Respondents experience with human rights violation**

Variable	Not at all	Rarely	Often	Very often
In the last 12 months have you lost a job or another source of income?	402(93.1%)	9(2.1%)	2(0.5%)	19(4.4%)
In the last 12 months were you refused employment?	401(92.8%)	11(2.5%)	22(2.5%)	9(2.1%)
In the last 12 months were you refused promotion as result of your HIV status?	392(90.7%)	6(1.4%)	15(3.5%)	19(4.4%)
In the last 12 months were you suspended or prevented from attending an educational institution?	392(90.7%)	6(1.4%)	15(3.5%)	19(4.4%)
In the last 12 months were your children prevented from attending educational institution?	378(87.5%)	29(6.7%)	17(3.9%)	8(1.9%)
In the last 12 months have you been denied health services including dental care because of your HIV status?	396 (91.7%)	22(5.1%)	11(2.5%)	3(0.7%)
In the last 12 months have you been denied family planning services because of your HIV status?	389 (90.0%)	8(1.9%)	29(6.7%)	6(1.4%)



**Figure 2: Respondents' Experience on human rights violation**

**Test for Hypothesis**

Ho: There is no association between knowledge and the stigmatization and discrimination of HIV positive individuals enrolled in Ondo State

**Table no 5: Shows level of association between summarized knowledge with summarized stigma and human right violence**

Variable	Not violated	Violated	X <sup>2</sup>	Df	P
Good knowledge	330(82.5%)	70(17.5%)	3.71	1	0.06
Poor knowledge	22(68.8%)	10(31.2%)			
	Not stigmatized	Stigmatized			
Good knowledge	305(76.2%)	95(23.8%)	3.006	1	0.08.
Poor knowledge	20(62.5%)	12(37.5%)			

There is no association ( $p > 0.05$ ) between summarized knowledge with summarized stigma and human right violation as shown in table 7 above. The null hypothesis is not accepted.

**IV. Discussion**

In this present study, majority were females (63%) within age range 26-36 years (52.3%), Christian (74.5%) with tertiary education, Yoruba (71.1%) and Christians. This is not consistent with study done by [5] in Southern India and [6] in Northern India where majority are men and between 31-40 years with secondary educational status. Also, majority were married (44.9%) similar to other study findings by [7;8] Results also showed that Knowledge on HIV and ART services was high as more than two third knew about unprotected sexual intercourse, blood transfusion, mother to child transmission, Injection drug use as mode of transmission of infection, ART can cure the infection, ART can reduce the viral load, improves health and functionality of immune system as well as ART is a lifelong treatment respectively

Many studies, such as [9], [10], [11] and [12] reported discrimination of PLHA by family members, but none of them reported quantitative data because the majority of the research work was qualitative in nature, with the exception of Bogart et al, who reported 79% of the PLHA experienced discrimination, which is significantly higher than the current study.

The dread of disclosing PLHA's seropositive status to others was a manifestation of perceived stigma. [8]. noted that PLHAs were determined to keep their status hidden owing to interpersonal rejection. [11] emphasized on how PLHA's fear of revelation leads to psychological discomfort, such as depression.

Prevalence of stigmatizing experiences varied widely according to previous studies. In this study, less than one tenth were often excluded from social gatherings (2.3%), religious activities (1.6%), family activities (1.6%) , undergoes sexual rejection (3.5%) , discriminated by their sexual partners (4.2%) due to their HIV/AIDS status. This is lower compared to 52% reported by [5] his study on stigmatization and discrimination toward People Living with HIV/AIDS in a Coastal City of South India and 45% by [13] among HIV/AIDS attending antiretroviral clinic in a centre of excellence in HIV care in India.

In addition, 25% was recorded by [14] in his work on "Assessment of stigma and discrimination experienced by people living with HIV and AIDS receiving care/treatment in University of Ilorin Teaching Hospital (UITH), Ilorin, Nigeria. This large range of results could be attributed to the several stigma indices/measures. Blaming for being HIV positive and name calling were among the forms of stigma experienced. Examples of discriminatory practices against PLHIV were hospital (selective use of gloves, poor quality care, and isolation from other patients); community (social isolation, restriction in family events, and hostility); family (not sharing cutlery and toilet facilities, breach of confidentiality); and workplace (threat of termination, isolation by coworkers).

**V. Conclusion**

In conclusion, this study has been able to reveal that PLWHA suffer from the burden of HIV-related stigma at a lower level as less than one tenth were often excluded from social gatherings , religious activities , family activities , undergoes sexual rejection , discriminated by their sexual partners due to their HIV/AIDS status. This was higher among those with lower educational status, Yorubas and Kogi indigenes and those that are married but not staying together.

Also, the most common violation of human rights was that of being denied education , refused promotion , refused employment , denied health services including dental care as well as have you been denied family planning services due to their HIV/AIDS in the past of 12 months by less than one tenth of respondents.

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