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Short Communication

Clients' satisfaction with HIV treatment and care services in Nigeria

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ABSTRACT

Objective: Many Sub-Saharan Africa countries have witnessed rapid scale-up of HIV treatment and care services in recent years. However, there is increasing evidence suggestive of poor quality of services. In this study, we examined clients' satisfaction with quality of HIV treatment and care services in Nigeria.

Study design: This was a cross-sectional survey of people living with HIV (PLHIV) receiving HIV treatment and care services.

Methods: The study included 1212 PLHIV receiving HIV treatment and care in 96 health facilities across 12 states. We collected data on clients' satisfaction with four quality domains (confidentiality, staff attitude, physical structure, and perceived improved health) and the overall quality of care, sociodemographic characteristics, type of facility, distance to facility, and time spent at facility. A logistic regression analysis was conducted with clients' satisfaction with the overall quality of care as the dependent variable.

Results: About 90% of the respondents were satisfied with the overall quality of care. Women, rural dwellers, and Muslims, public (government-owned) healthcare facility users, those unsatisfied with confidentiality, and those unsatisfied with staff attitude had statistically significant lower odds of being satisfied with the overall quality of care. After adjusting for sociodemographic characteristics and the type of facility, confidentiality (adjusted odds ratio [AOR] = 0.1, 95% confidence interval [CI] = 0.01–0.81, $P = 0.031$) and staff attitude (AOR = 0.24, 95% CI = 0.09–0.67, $P = 0.006$) remained statistically significant.

Conclusions: Clients' satisfaction with the quality of HIV treatment and care services at health facilities in Nigeria appears high. HIV service provision should be in line with

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standard ethical principles and more patient centered and responsive to sociodemographic characteristics of PLHIV.

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Introduction

In recent years, there has been a rapid scale-up of HIV treatment and care services, particularly antiretroviral therapy (ART), to mitigate the burden of the HIV epidemic in many Sub-Saharan African countries. For example, in Nigeria, the number of people living with HIV (PLHIV) accessing ART has increased from 349,000 in 2010 to 967,000 in 2016, of the estimated 3.1 million PLHIV.[1] However, poor quality of care that influences utilization of services by PLHIV, their adherence to treatment, and retention in care have continued to limit the impact of expanded ART programs.[2]

Clients' perspective of (or satisfaction with) healthcare services is an essential quality indicator that can be used to identify gaps and develop quality improvement interventions. Studies in Sub-Saharan Africa have reported that factors including availability of drugs and staff, privacy, amenities, and staff attitude affect clients' satisfaction with HIV treatment and care services.[3,4] While there is a growing body of evidence on quality of HIV treatment and care service from clients' perspective in Sub-Saharan Africa, there is a paucity of evidence in Nigeria. Earlier epidemiologic studies in Nigeria suffer from limited generalizability because of the unrepresentativeness of the study population.[5,6]

In this study, we evaluated clients' satisfaction with HIV treatment and care services across health facilities in the six geopolitical zones of Nigeria.

Methods

Study design and location

This study was a cross-sectional survey conducted in 11 states and the Federal Capital Territory (FCT) of Nigeria between January and May 2015. Using a multistage sampling approach, two states were randomly selected from each of the six geopolitical zones of Nigeria. The selected states were Cross River and Akwa Ibom (South South); Ondo and Oyo (South West); Taraba and Bauchi (North East); Sokoto and Kaduna (North West); Benue and the FCT (North Central); and Imo and Abia (South East). In each state, six secondary healthcare facilities and two primary healthcare facilities were also randomly selected.

Sample size estimation and study population

We calculated a sample size of 1212 to achieve a confidence level of 95% and statistical power of 80%, allowing for 2.5% non-response rate. About 101 clients were targeted in each state and the FCT. HIV-infected adults (15–49 years) with a minimum of two visits for HIV-related services to the facility were included in the study.

Data collection and analysis

We adapted a validated instrument, Patient Satisfaction Questionnaire III for this study (https://www.rand.org/health/surveys_tools/psq.html). The adapted self-administered questionnaire was pretested among 15 PLHIV drawn from a health facility that had been excluded from the study in the FCT. Clients attending the facilities during clinic days who met the inclusion criteria were conveniently selected. The questionnaires were administered by the interviewers in the HIV clinic waiting areas. When the clients did not comprehend English language, the questions were interpreted by an interviewer who understood the patient's local language.

We assessed clients' satisfaction with the following quality domains: physical structure, confidentiality, staff attitude, perceived improved health, and the overall quality of care. Data were also collected on socio-economic characteristics, type of facility, distance from facility, and time spent at facility. We performed univariate and multivariate binary logistic regression analysis with clients' satisfaction with overall quality of care as the dependent variable. P-value ≤ 0.05 was considered statistically significant. The analyses were conducted using STATA, version 13 software.

Results

Sociodemographic characteristics and nature of health facility

A high proportion (69%) of the clients were women. About 45% of the respondents were between 30 and 49 years, while the majority (68%) of the respondents were married. About half of the respondents (50.3%) lived in urban areas. Approximately 21% of the respondents did not have formal education. Half of the respondents (50%) earned N 10,000 (US$ 50) or less monthly. Majority of the facilities were public health facilities. About 67% and 64% of the respondents spent more than 1 h in the facilities and travel more than 5 km to access care, respectively.

Satisfaction by assessed quality domains

The frequency of clients who were satisfied with the each of the four quality domains and the overall satisfaction with the quality of care. More than 95% of the respondents were satisfied with confidentiality and perceived improved health and staff attitude. About 90% of the respondents were satisfied with the overall quality of care.

Factors associated with clients' satisfaction

Results of the univariate and multivariate analyses are presented in Table 1. The sociodemographic factors that were

Table 1 – Univariate and multivariate analyses with clients' satisfaction with the overall quality of care.

Variables	Univariate analysis		Multivariate analysis	
	OR (95% CI)	P-value	AOR (95% CI)	P-value
Age (years)				
15–29	1			
30–49	1.21 (0.79–1.86)	0.371		
50+	1.52 (0.68–3.39)	0.304		
Gender[a]				
Male	1		1	
Female	0.52 (0.32–0.83)	0.006	0.58 (0.35–0.97)	0.039
Marital status				
Single	1			
Married	1.26 (0.78–2.06)	0.349		
Separated/divorced	1.25 (0.56–2.81)	0.584		
Widowed	1.33 (0.55–3.22)	0.528		
Education				
No education	1			
Primary	2.22 (1.23–4.06)	0.009		
Secondary	2.02 (1.22–3.33)	0.006		
Tertiary	1.26 (0.73–2.16)	0.403		
Religion[a]				
Christian	1		1	
Muslim	0.62 (0.42–0.93)	0.021	0.59 (0.38–0.91)	0.017
Others	0.64 (0.14–2.88)	0.560	0.55 (0.12–2.60)	0.454
Place of residence[a]				
Urban	1		1	
Rural	0.48 (0.32–0.74)	0.001	0.51 (0.33–0.80)	0.003
Income (naira)				
≤10 000	1			
10 001–99 000	1.89 (1.18–3.03)	0.008		
>99 000	1.73 (0.40–7.53)	0.467		
Access to facility				
>5 Km	1			
≤5 Km	1.00 (0.67–1.50)	0.981		
Time spent at facility				
>1 h	1			
≤1 h	0.68 (0.46–1.01)	0.059		
Type of facility[a]				
Faith based	1		1	
Private for profit	1.14 (0.24–5.51)	0.873	0.81 (0.15–4.30)	0.802
Public	0.31 (0.15–0.65)	0.002	0.32 (0.14–0.76)	0.009
Physical structure				
Satisfied	1			
Not satisfied	0.84 (0.42–1.67)	0.619		
Confidentiality[a]				
Satisfied	1		1	
Not satisfied	0.1 (0.01–0.74)	0.024	0.09 (0.01–0.81)	0.031
Staff attitude[a]				
Satisfied	1		1	
Not satisfied	0.33 (0.13–0.84)	0.020	0.24 (0.09–0.67)	0.006
Perceived improved health				
Satisfied	1			
Not satisfied	1.03 (0.24–4.47)	0.970		

OR, odds ratio; CI, confidence interval; AOR, adjusted odds ratio.
[a] Variables whose aggregated data were statistically significant (P-value ≤ 0.05).

significantly associated with clients' satisfaction with the overall quality of care were gender, religion, and place of residence. The odds ratios (ORs) of being satisfied with the overall quality of care were 0.5 (95% confidence interval [CI] = 0.3–0.83, P = 0.006) for female and 0.5 (95% CI = 0.3–0.7, P = 0.001) for rural dwellers. Muslims were less likely to be satisfied with the overall quality of care compared with Christians (OR = 0.6, 95% CI = 0.4–0.9, P = 0.02).

The quality domains that were statistically associated with clients' satisfaction with the overall quality of care were confidentiality and staff attitude. Respondents who unsatisfied with confidentiality were 90% less likely to be satisfied with the overall quality of care (OR = 0.1, 95% CI = 0.01–0.74, P = 0.024). Those unsatisfied with staff attitude had lower odds of being satisfied with the overall quality of care (OR = 0.3, 95% CI = 0.1–0.8, P = 0.020). A significantly reduced odds ratio for

satisfaction with the overall quality of care was also observed for public healthcare facility users compared with faith-based healthcare facility users (OR = 0.3, 95% CI = 0.2–0.7, $P = 0.002$).

After adjusting for sociodemographic characteristics and the type of facility, confidentiality (OR = 0.1, 95% CI = 0.01–0.81, $P = 0.031$) and staff attitude (OR = 0.24, 95% CI = 0.09–0.67, $P = 0.006$) remained significantly associated with satisfaction with the overall quality of care.

Discussion

In this study, we found that the majority of the HIV clients were satisfied with the overall quality of HIV treatment and care services they were receiving at healthcare facilities. Clients' satisfaction varied with gender, religion, place of residence, and type of facility, and it was significantly influenced by confidentiality and staff attitude.

Satisfaction of PLHIV with the quality of care they receive is very important in HIV service delivery. Dissatisfaction with services may result in loss to follow-up, which can negatively affect treatment outcomes.[2] Our finding of high level of satisfaction with quality of care among PLHIV is consistent with similar studies in Nigeria.[5,6]

The sociodemographic characteristics of PLHIV may influence and determine their needs when seeking HIV services. Such needs may be related to cultural norms or religious beliefs. If these needs are not met, clients may be unsatisfied with the care they receive. For example, in our study, it is possible that healthcare facilities or clinics accessed are not designed or do not operate in a way to meet the unique needs of Muslims or healthcare providers are not sensitive enough to their religious beliefs.[7] Thus, it is important that HIV programs and healthcare workers are sensitive to sociodemographic characteristics such as gender and religion and provide patient-centered services. Our finding also highlights the quality of care in public (government-owned) healthcare facilities. Although they are likely to have lower cost of services, public healthcare facilities may have long waiting hours and experience out of stock of antiretroviral drugs and other commodities.[8,9] This may explain the association between public healthcare facilities and satisfaction with quality of care in our study.

Negative behaviors and discriminatory attitudes by healthcare workers toward PLHIV in Nigeria have been reported in the past.[10] Interestingly, we found that high proportion of clients were satisfied with staff attitude. This may suggest better awareness and less stigmatization of HIV among healthcare providers. In 2014, Nigeria enacted the HIV and AIDS (antidiscrimination) law to address among other things stigma and discrimination by healthcare workers. However, there is paucity of evidence on its impact on HIV service delivery by healthcare workers. Some of the staff attitudes that enhanced patients' satisfaction in our study have included friendly gestures shown by healthcare workers such as respecting patients, listening to patients' opinions, and allowing them to contribute to their management plans, and adhering support.

Our findings also highlight the importance of confidentiality that remains a critical ethical issue in HIV treatment and care services. In a country where PLHIV still face stigma and discrimination in the communities, the assurance that the HIV status will be kept confidential and not be disclosed without permission is very essential. Evidence has suggested that PLHIV are likely to avoid health facilities where there is possibility of confidentiality being breached intentionally or accidentally by healthcare workers.[11]

Our study had some limitations. There could have been some courtesy bias. Some respondents might have understated their dissatisfaction with service. Also, we dichotomized all the variables for satisfaction domains into satisfied and not satisfied for the ease of interpretation of results and to minimize misclassification by the respondents. This might have probably exaggerated our findings. Although majority of the respondents had at least primary school education, we did not assess their treatment literacy. Future research can use community-based study to assess satisfaction with quality of care among PLHIV and its relationship with retention in care. Qualitative studies are needed to further understand clients' satisfaction among public healthcare facilities users.

Conclusions

There seems to be high client satisfaction with overall quality of HIV treatment and care services among PLHIV attending healthcare facilities in Nigeria. In provision of HIV treatment and care services, healthcare workers should adhere to the standard ethical practices and good professional behavior. HIV service delivery needs to be more patient centered and responsive to sociodemographic characteristics of PLHIV.

Author statements

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Ethical approval

Ethical approval for this study was granted by the FCT Health Research Ethics Committee. Consent was obtained from all the participants after providing information about the survey, including its objectives. The respondents were assured of the anonymity and confidentiality of their responses.

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Competing interests

None declared.

Disclaimer

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