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An assessment of the implementation of the HIV workplace policy in Akwa Ibom State: a cross-sectional descriptive study

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Abstract

Background Eliminating AIDS by 2030 will remain a mirage if obstacles to achieving zero new HIV infections and viral suppression, like stigma and discrimination against people living with HIV (PLHIV) are not eliminated. Several strategies and policies are targeted at this issue but it remains a huge challenge globally. Like other countries, Nigeria adopted the HIV in the Workplace policy (HIV WPP) in 2013, aimed at protecting the rights of PLHIV in the workplace. Akwa Ibom State (AKS), Nigeria, adopted this policy in 2014. However, since its adoption, its implementation has not been assessed. This study aimed to evaluate the availability and implementation of the HIV WPP in the state.

Methods A cross-sectional study using a mixed methods research approach was conducted for 591 consecutively recruited employees and 43 employers/ decision-makers across 23 organizations. Data was collected from October 2022 to February 2023. Seven criteria based on the Policy Implementation Assessment Tool were used to assess policy implementation. Scores above 70% were categorized as optimal policy implementation. The chi-square test was used to determine the factors associated with the level of implementation of the policy. Results were analyzed using STATA 15.1 for quantitative and NVivo 10 for qualitative data.

Results A total of 591 employees provided completed responses, the majority were females (59.7%) and 60.2% worked in government establishments. Of the employers, 55.6% were < 45 years old, 59.1% were males, 72.7% had a university education and the median duration working as a manager was 5.5 years. Of the 22 assessed establishments, the policy was available in 1 (4.5%) organization and 95% had a suboptimal implementation of the policy. The unavailability of the policy and resources for implementation were deterrents to the level of implementation of the policy.

Conclusion The level of implementation of the Akwa Ibom HIV in the workplace was suboptimal across both private and public sectors in the State. This was attributed to the unavailability of the policy and other resources for implementation. The State Agency for the Control of AIDS should consider improving access to the policy and strengthening implementation structures.

Keywords HIV, Stigma & discrimination, PLHIV, Anti-stigma policy, Akwa Ibom State, Occupations, Nigeria

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Background

HIV-related stigma and discrimination remains a major barrier to achieving the global UNAIDS goal of zero HIV deaths and zero new HIV infections by 2030 [1]. Stigma and discrimination negatively impact the progress made across the HIV prevention, care, and treatment continuum [1–3]. The workplace is strategic in the fight against stigma and discrimination [4]. Of the 38.4 million PLHIV in 2021, approximately 29.9 million were in the global workforce and over 50% of individuals aged 15–49 years had discriminatory attitudes toward people living with HIV [4–6]. Sub-Saharan Africa bears the brunt of the HIV epidemic and the prevalence of discriminatory attitudes towards PLHIV remains high at approximately 47% [6]. As of 2019, Nigeria with an estimated 1.8 million people living with HIV (PLHIV), had a prevalence of discriminatory attitudes towards PLHIV above the regional average (59%) [7].

Several policies have been adopted to mitigate HIV-related morbidity and mortality and implementation of these policies has positively impacted outcomes across the HIV continuum of care [8]. For instance, HIV incidence dropped by 38% in Eastern and Southern Africa where HIV prevention policies were fully adopted and implemented between 2010 and 2019. Conversely, HIV incidence increased by 72% in Eastern Europe and Central Asia where HIV-related policies were neither adopted nor implemented within the same period [8]. Rwanda, which adopted and implemented five of the seven policy elements in the anti-HIV stigma and discrimination category, reported an 80% decrease in stigma and discrimination experienced by PLHIV and over 50% decrease in PLHIV's rights violations between 2009 and 2020 [9].

Globally, many countries have adopted the HIV in the workplace policy and they have diverse experiences based on their efforts in its implementation. In Zambia, the HIV in the workplace policy was adopted by the government, and private organizations have adopted it as a standalone policy or mainstreamed it into their existing organizational policies [10]. The same is true for many other Southern African countries including Malawi and South Africa where all organizations must have a workplace policy [11, 12].

Nigeria, on the other hand, has fully adopted only two and partially adopted one of these seven policy elements [8]. These fully adopted policies were the policy to establish national human rights institutions and gender-based violence laws while the non-discrimination protection policy was only partially adopted [8]. Despite the introduction of the 2009 National HIV/AIDS policy, which aimed to reduce stigma and discrimination against PLHIV, these challenges persist [13]. In 2013, HIV-related stigma and discrimination in Nigeria affected approximately 46.8% of the PLHIV population even as

many subnational entities initiated proactive measures by formulating and implementing their anti-stigma and discrimination regulations to improve the broader HIV response [7, 13]. By 2018, despite the presence of more anti-discriminatory policies targeting HIV, the level of stigma and discrimination against PLHIV had risen to 59% [13]. HIV-related stigma and discrimination in the workplace are linked to social isolation, mental health challenges, unemployment, poverty, and decreased quality of life among people living with HIV [14]. The ILO Code of Practice on HIV/AIDS and the World of Work provides guidelines for the development of policies and programs on HIV/AIDS in the workplace, and several countries have adopted workplace policies and programs on HIV and AIDS to reduce the spread of HIV and minimize adverse impact [15]. A study in Zambia found that the existence of HIV in the workplace policy positively affected the implementation of HIV-related programs in the private sector in Zambia [12].

Akwa Ibom State, Nigeria, has the highest HIV prevalence (5.5%) in-country and the State government adopted the HIV in the Workplace Policy in 2014 [7, 16]. The policy guides government, employers, employees and other stakeholders on appropriate workplace responses to HIV-related issues. The Akwa Ibom State Agency for the Control of AIDS (AKSACA), is responsible for the coordination of all components of the implementation of the policy including its review [17]. However, stigma and discrimination continue to fuel the epidemic in the state including in workplace settings [17]. A study conducted in 2017 among clients receiving antiretroviral therapy in the University of Uyo Teaching Hospital reported that the majority of clients did not disclose their status to their employer while 20.2% of those who disclosed faced discriminatory attitudes in their workplace [18]. Since the introduction of an HIV in the Workplace Policy in 2014, there has been no evaluation of its implementation, particularly in light of the persistently high levels of stigma observed in the workplace in Akwa Ibom State. Without the evaluation of this policy, the implementation outcome and the effectiveness of the policy cannot be ascertained in the State. Therefore, this study aimed to assess the availability of the AKS WPP, evaluate the level of its implementation, and examine associations between selected factors and the level of implementation of HIV in the Workplace Policy in both the public and private sectors within Akwa Ibom State.

The primary beneficiaries of this study are people living with HIV, especially the Network of People Living with HIV & AIDS, and other civil society organizations, who can utilize the results from our study for advocacy to improve the implementation of the AKS HIV WPP. The secondary beneficiaries will be the AKSACA who will utilize the result of this study to strengthen HIV in

the Workplace policy implementation. Akwa Ibom State Ministry of Health will be the tertiary beneficiary as the strengthening of the gaps highlighted by this study would support stigma reduction and improve the State's HIV response towards epidemic control.

Materials and methods

Research design

A descriptive cross-sectional approach with concurrent exploratory mixed method involving both quantitative and qualitative data collection was deployed. The design was to enable a deeper exploration of issues raised and triangulation of responses. For the quantitative data collection, pre-tested questionnaires were administered among employees while for the qualitative methods, Focus Group Discussions (FGD) were also conducted for employees to deepen understanding of issues. Key Informant Interviews (KII) were conducted with employers, high-level government officials, and decision-makers in key government ministries and private sectors. An adapted & pre-tested discussion guide and interview schedule were used for the FGD and KII respectively.

Study area

This study was conducted in Akwa Ibom State, located in the south-south geopolitical zone of Nigeria, along the Atlantic Ocean coast. It has a population of approximately 5,482,200 persons based on projections from the 2016 census, with more than half (59.4%) of the population aged 15–64 years [19]. It is a multi-ethnic state with an almost even gender spread of about 2,680,687 females (49.2%) and 2,770,590 males (50.8%) in 31 Local Government Areas (districts) [19]. With an HIV prevalence of 5.5%, the state has over 400 HIV Testing and Counseling centers and treatment programs to place the estimated 178,000 PLHIV on Antiretroviral Therapy (ART) [16]. HIV prevention, testing, care, and treatment services are supported by PEPFAR through USAID and implemented by non-governmental organizations through both facility and community-based strategies. Drivers of the epidemic in the State include the hard-to-reach geographic location which affects access to HIV testing services, low-risk perception, high-risk sexual behavior, religious and superstitious belief, and other sociocultural practices which affects the uptake of HIV testing services and clients' retention on treatment [20].

Population and sampling

A total of twenty-three (ten public, twelve private, and one civil society, the Network of People Living with HIV and AIDS in Nigeria (NEPHWAN), Akwa Ibom State Chapter) organizations/establishments were assessed. From the list of 8 public organizations statutorily tasked with the implementation of HIV in the state, two government ministries and a

health facility were selected in each of the 3 senatorial zones by simple random sampling through balloting. To eliminate bias, the same approach was utilized to select 4 organizations from the private sector (from a pool of organizations having a minimum of 5 staff) in each senatorial zone. The only tertiary health facility in the state, the University of Uyo Teaching Hospital, and NEPHWAN, the umbrella network for PLHIV, were purposively selected due to their unique roles in the HIV response. The number of respondents to be contributed by each organization to the sample size was determined using proportional allocation based on the staff/membership strength of each organization as contained in the nominal roll of each organization. Purposive sampling was deployed to identify and select the employers/ decision-makers for the FGD/KII before the commencement of the quantitative survey, ensuring that participants of the FGD/KII were not also interviewed in the quantitative study.

Sampling procedure and sample size

A sample size of 576 was determined for the quantitative arm using Fisher's formula for sample size determination in cross sectional studies, $n = z^2 pq / d^2$ [21]. Based on a 95% confidence interval, 5% ($d = 0.05$) margin of error, $p =$ the proportion of clients who were aware of HIV/AIDS workplace policy (50%, 0.5) and using $q = 0.5$ & $z = 1.96$, and a design effect of 1.5. To account for non-response or poorly completed questionnaires, a 10% non-response rate was added based on learnings from similar study resulting in a sample size of 634 [11]. The probability sampling technique utilizing the nominal roll of each organization as of September 2022 as the sampling frame was used. A simple random sampling approach was deployed to select the respondents within each organization in proportion to the organization's staff strength.

Purposive sampling was deployed to select the employees for the FGD ensuring that they were excluded from the quantitative study. Each FGD consisted of 6–8 persons and care was taken to ensure that there were all staff in the same cadre within the organizations to ensure easy discussion and sharing of information [22]. Purposive sampling was also deployed to select the respondents for the KII ensuring that they were employers from the private sector or decision-makers within the government establishment at the directorate level and above. Only one participant was selected per organization for the KII [22].

Study instrument

A questionnaire used in a similar study in South Africa was adapted to reflect the local context in line with the provisions of the Akwa Ibom State HIV in the Workplace policy and the Policy Implementation Assessment tool [11, 23]. A discussion guide and an interview schedule for employers and decision-makers, each having 10 questions, were also adapted for the FGD and KII respectively

[23]. The employee's questionnaire contained 9 questions that assessed the implementation of the AKS WPP. All tools were pre-tested in 4 organizations that were not participating in the study by trained Research Assistants (RA) to ensure clarity of the questions and a shared understanding by the RA. The questionnaires were pre-tested with 63 persons, representing 10% of the quantitative sample size, and 6 employers/decision makers participated in the KII/FGD. The results were utilized to correct poorly understood sections of the instruments before the final deployment. The completed questionnaires were reviewed for correctness and completeness, and coded before being analyzed. Data generated during each session of the quantitative arm of the study were digitally recorded and later transcribed manually. All tools were in English and all sessions were conducted in English and in few cases, the local language was used to explain some items to participants where necessary. Both the quantitative and qualitative tools were used to address the specific objectives.

Data collection

Seven (7) research assistants (RAs) who were recruited and trained to use the study instrument and research ethics supported the principal investigator, HI, during data collection. The questionnaires were pre-tested on 63 (10%) respondents in organizations similar to the ones to be assessed, that were not participating in the study, and corrections were made on poorly understood sections before the final deployment of the instrument. A total of 634 questionnaires were distributed and 591 respondents duly completed or were assisted by the RAs to complete and return their questionnaires. The study had a 7% non-response rate. The FGD guide and KII schedule were also pre-tested to ensure a shared and accurate understanding of the tools. Three (3) FGD and 22 KII involving 43 persons were conducted.

Analysis and measurement

Categorical variables from quantitative data generated from the study were summarized as frequencies and percentages. Mean and standard deviation were calculated for continuous data while median and interquartile range were determined for numeric non-normally distributed data. The results were presented in tables and figures and the data was analyzed using STATA version 15.1 (by StataCorp LLC, Texas, USA). The outcome/ dependent variable was the level of implementation of the Akwa Ibom State HIV in the Workplace policy.

For the qualitative study, data from each session were digitally recorded and subsequently transcribed manually. The transcripts, produced verbatim by the RAs, were carefully read, re-read and reviewed by the researchers. A coding system was developed based on pre-identified

and emerging themes and codes were assigned to the data before a thematic analysis was done using NVIVO 10 software (from Lumivero.com). Recurring themes were identified with connections between data themes explored. Using the Cronbach Alpha test, a score of 0.89 was obtained for internal variability.

The level of implementation was assessed across seven policy implementation domains (policy availability, socio-political and economic context, leadership, stakeholder involvement, resources, operations, and feedback) and categorized based on 0 as none, 1 as poor, and 2 as optimal. Respondents with less than 30% of the total score were adjudged as not implementing the policy. Scores between 31 and 69% were judged poor while those with scores of 70% and above were accepted as having a good/optimal level of implementation. The chi-square test was used to determine the association between socio-demographic characteristics and the level of implementation of AKS HIV WPP at a level of significance of $P < 0.05$. Apart from questions captured on tables in the Result section, other sample questions include "Is there an HIV WPP in your organization?", "Which institution leads the HIV WPP implementation in the state" (Answer is AKSACA), "Do you have a functional HIV desk officer or similar position to coordinate the implementation of the HIV WPP in your organization?" (If yes, the individual was named and their role was explained accurately to be counted as a correct answer).

Results

Six hundred and thirty-four (634) questionnaires were shared and 591 were well completed and used for the study representing a 93.2% response rate. Thirty-four (34) of the 43 questionnaires not utilized were not well completed and nine of the respondents pulled out of the survey for personal reasons. Three (3) FGDs and twenty-two (22) Key Informant Interviews (KII) were conducted (Table 1).

Findings from the quantitative survey

The majority of the employee respondents in this study were females representing 59.7% with the mean age of respondents being 38 years. Most of them (60.2%) worked in government establishments, the median duration in service was 5 years (2–10) years, and those in managerial positions accounted for 18.6% of respondents. The majority of the respondents had a university degree representing 56.4%.

Forty-three respondents were involved in the qualitative arm of the study - in 3 FGD for employees and 22 KII for employers and decision-makers. There were more males (53.5%), and the majority (65.1%) had a university degree. Of the employers and decision-makers, 55.6% were younger than 45 years of age, 59.1% were males, and

Table 1 Distribution of study participants by survey type and organization

Arm of Survey Organisation	Quantitative Arm			Qualitative Arm		
	Staff population	Planned sample size	Actual sample size	# of FGDs conducted	# of participants	# of KII conducted
Banks	232	43	37	0	0	3
Private Schools	219	40	36	0	0	3
Hotels	652	120	102	0	0	3
Companies	316	58	43	0	0	3
Health Facilities	743	136	136	1	8	4
Govt Ministries/ Parastatals	1198	220	220	1	6	6
NEPHWAN	95	17	17	1	7	0
Total	3455	634	591	3	21	22

72.7% had a university education. The median duration of working as a manager/decision-maker was 5.5 years (Table 2).

Majority (89.4%) of the employees reported that their organization practices protect the confidentiality of employees' HIV/AIDS status (Table 3), 7.5% reported that their organizations mandated employees to disclose personal HIV-related information, 46.7% employees reported that HIV testing was obligatory before initial employment, 70 respondents (11.8%) reported that HIV testing was a mandatory prerequisite for promotions within their organizations and 13 respondents (2.2%) reported instances where an employee's appointment had been terminated based on their positive HIV status. The majority (451, 76.3%) of respondents affirmed that the senior management encourages discussion about HIV/AIDS in the workplace (Table 3).

Of the 22 assessed establishments, only 1 (4.5%) organization, a private firm, had an HIV in the workplace policy and provided enough resources for its implementation, and 6 (27.3%) had a functional HIV/AIDS committee (Table 4). Implementation of HIV in the Workplace policy was suboptimal (none or poor) across all policy domains in the majority (21/22) of the organizations. In the socio-political context domain, 21 out of the 22 organizations had a poor rating. There was no involvement of stakeholders in 13 organizations cutting across public government and private establishments. Across all domains, no public organization achieved an optimal rating (Table 4).

The level of implementation of the AKS HIV WPP was not associated with the managers' age, educational qualification, organization's ownership or sector (Table 5).

Findings from the qualitative analysis

Availability

A key issue was the non-availability of copies of the AKS WPP in organizations in the state. After the policy was adopted, few copies were printed and none was found

during this survey. During the discussions, this was explored. Some of the snippets from the discussion are stated below:

"We [AKSACA] did not even have many copies. We had very few copies left [after the launch]. Even at that, the people we gave did not even have enough. Many of them were still asking for more and we didn't have enough at the agency level.... There's no way that that document could have gone to all the places... I can't remember if we had up to a hundred copies. It was limited by the amount of money that was available" (AKSACA 3).

"I think that eh, the system or the structure that, uh, was in charge of the workplace policy did not disseminate them to (HIV) support groups. And nobody followed up after that" (FGD, NEPHWAN R1).

While most public and private companies had neither their WPP nor the AKS HIV WPP, one private organization, an affiliate member of an international brand, had its own organizational WPP and were deliberate in ensuring all staff understood and complied with the provisions of the policy.

"I don't know about the, uh, state HIV workplace policy, but here, we have our HIV Workplace policy. Every staff member has a copy of the policy and we review it every 4 years with the most recent one done this year (2022). We don't have any issues of stigma and discrimination here and staff walk in freely to the clinic to test and commence ARVs" (Priv Org2).

Socio-political and economic context

HIV awareness is high in the state due to prolonged intervention by donors over the years. Yet, many unethical practices, including pre-employment HIV testing and using the information to discriminate against an employee, abound. Some managers stated that,

Table 2 Socio-demographic characteristics of respondents in the quantitative study (n=591) and qualitative study (n=43) (Focused Group Discussions and Key Informant Interviews including 22 managers)

Variables	Frequency	Percent
Quantitative study participants (n=591)		
Sex		
Male	238	40.3
Female	353	59.7
Age (mean+/-SD) =37.64+/-8.83		
Type of organization		
Government	356	60.2
Non-Governmental	17	2.9
Private	218	36.9
Number of years in service (median (interquartile range) =5 (2–10))		
Work Position		
Managerial	110	18.6
Non-Managerial	481	81.4
Highest Level of Completed Education		
No formal education	2	0.3
Primary education	8	1.4
Secondary education	81	13.7
Post-secondary education(non-university)	167	28.3
University	333	56.4
Qualitative study participants (n=43)		
Sex		
Male	23	53.5
Female	20	46.5
Mean Age = 45.2+/-10.00		
Number of years in service (median (interquartile range)=5.5 (3.5–10.5))		
Highest Level of Education		
Primary	4	9.3
Secondary	7	16.3
Post-secondary (non-university)	4	9.3
University	28	65.1
KII participants -Employers and decision-makers (n=22)		
Age		
Less than 45	12	54.5
45 and above	10	45.5
Mean age =45.5+/-10.5 years		
Sex		
Male	13	59.1
Female	9	40.9
Level of education		
Primary	1	4.6
Secondary	3	13.6
Post-secondary (non-university)	2	9.1
University	16	72.7
Number of years in management (Median (interquartile range) =5.5 (3–10))		

“Well, since we deal with food here, I will not employ the person (living with HIV)” (Priv Org4).

“We try not to put him or her in a department that is, um, too obvious like the food and the beverages unit.... We send him to another department that

Table 3 Assessment of implementation of the AKS workplace policy from employees of selected organizations in AKS (n=591)

Variables	Frequency	Percent
My organization's practices protect the confidentiality of employees' HIV/AIDS status		
Yes	528	89.4
No	41	6.9
Don't Know	22	3.7
My organization requires workers to disclose personal HIV-related information they are unwilling to		
Yes	44	7.5
No	471	79.7
Don't know	76	12.9
HIV testing is a mandatory requirement in my organization before employment		
Yes	276	46.7
No	275	46.5
Don't Know	40	6.8
HIV testing is a mandatory requirement in my organization before a promotion		
Yes	70	11.8
No	417	70.5
Don't Know	104	17.6
Has an employee's appointment in your organization been terminated based on HIV status		
Yes	13	2.2
No	440	74.5
Don't know	138	23.4
Senior management in my organization participates in HIV & AIDS program (training, health education, provision & or referral for HIV testing)		
Yes	241	40.8
No	350	59.2
Our labor unions encourage staff to participate in HIV/AIDS activities(n=384)		
Yes	257	66.9
No	35	9.1
Don't Know	92	24.0
My organization provides resources to implement HIV/AIDS programs		
Yes	159	26.9
No	432	73.1
Senior management encourages discussion about HIV/AIDS in the workplace		
Yes	451	76.3
No	140	23.7

they do not have contact directly with the guests. We shift that particular person to another department” (Priv Org3).

“I know the knife is involved in preparing food and someone can be wounded and the virus will, then, you know, we also deal on fresh vegetables here so we don't want to infect other people. Because of that I'll not (employ)”(Prv. Org 1).

Another employer stated that he would terminate the employment of a staff who he knows to be living with HIV.

Table 4 Implementation of AKS WPP by types of organizations in the state (n = 22)

Domain	Rating	Banks	Schools	Hotels	Coys	Pub. Fac. Eket SZ	Pub. Fac. Ik/Ek SZ	Pub. Fac. Uyo SZ
Overall	None	3(13.6%)	3(13.6%)	3(13.6%)	2 (9.1%)	3(13.6%)	3(13.6%)	2 (9.1%)
	Poor	0(0.0%)	0(0.0%)	0(0.0%)	1(4.5%)	0(0.0%)	0(0.0%)	2 (9.1%)
	Optimal	0(0.0%)	0(0.0%)	0(0.0%)	1(4.5%)	0(0.0%)	0(0.0%)	0(0.0%)
Availability	None	3(13.6%)	3(13.6%)	3(13.6%)	2 (9.1%)	3(13.6%)	3(13.6%)	4 (18.2%)
	Poor	-	-	-	-	-	-	-
	Optimal	-	-	-	1 (4.5%)	-	-	-
Socio-political and economic context	None	-	-	-	-	-	-	-
	Poor	3(13.6%)	3(13.6%)	3(13.6%)	2 (9.1%)	3(13.6%)	3(13.6%)	4 (18.2%)
	Optimal	-	-	-	1 (4.5%)	-	-	-
Leadership	None	3(13.6%)	3(13.6%)	-	2 (9.1%)	2 (9.1%)	3(13.6%)	1 (4.5%)
	Poor	-	-	3(13.6%)	-	1 (4.5%)	-	3(13.6%)
	Optimal	-	-	-	1 (4.5%)	-	-	-
Stakeholder involvement	None	3(13.6%)	3(13.6%)	2 (9.1%)	2 (9.1%)	1 (4.5%)	1 (4.5%)	1 (4.5%)
	Poor	-	-	1 (4.5%)	-	2 (9.1%)	2 (9.1%)	3(13.6%)
	Optimal	-	-	-	1 (4.5%)	-	-	-
Resources	None	-	3(13.6%)	1 (4.5%)	2 (9.1%)	2 (9.1%)	2 (9.1%)	2 (9.1%)
	Poor	3(13.6%)	-	2 (9.1%)	-	1 (4.5%)	1 (4.5%)	2 (9.1%)
	Optimal	-	-	-	1 (4.5%)	-	-	-
Operations	None	3(13.6%)	3(13.6%)	3(13.6%)	2 (9.1%)	1 (4.5%)	3(13.6%)	1 (4.5%)
	Poor	-	-	-	-	2 (9.1%)	-	3(13.6%)
	Optimal	-	-	-	1 (4.5%)	-	-	-
Feedback	None	3(13.6%)	3(13.6%)	3(13.6%)	2 (9.1%)	1 (4.5%)	3(13.6%)	1 (4.5%)
	Poor	-	-	-	-	2 (9.1%)	-	3(13.6%)
	Optimal	-	-	-	1 (4.5%)	-	-	-

Pub. Fac Public Health facility, SZ Senatorial Zone, Coys Other companies/business enterprises; - indicates zero performance in the area

Table 5 Association between selected factors and the level of implementation of AKS Workplace Policy

Variable	Level of Implementation			Total n (%)	Statistical tests and P-value (Chi-square) <= 0.05
	None n (%)	Poor n (%)	Optimal n (%)		
Age of Managers					0.64
Less than 45	10 (83.3)	1(8.3)	1(8.3)	12 (54.5)	
45 and above	9 (90)	1 (10%)	0 (0%)	10 (45.5)	
Sex of Managers					0.44
Male	12 (92.3)	1 (7.7)	0	13 (59.1)	
Female	7 (77.8)	1 (11.1)	1 (11.1)	9 (40.9)	
Manager's Level of Education					-
Non-University	6 (100)	0	0	6 (27.3)	
University	15 (100)	0	1	16 (72.7)	
Organization ownership					0.19
Private	11 (91.7)	0	1 (8.3)	12 (54.5)	
Government	8 (80)	2 (20)		10 (45.5)	
Type of Organization					0.56
Banks	3 (100)	0		3 (13.6)	
Schools	3 (100)	0		3 (13.6)	
Hotels	3 (100)	0		3 (13.6)	
Companies	2 (66.7)	0	1 (33.3)	3 (13.6)	
Health Facilities	3 (75)	1 (25)	0	4 (18.2)	
Ministries	5 (83.3)	1 (16.7)	0	6 (27.3)	

“You (will) go home.... Go and take your drug. You will not, you will not stay. You will not stay (work) here. You will go sharp sharp [immediately].” (Private Org 9).

Stakeholders' involvement

Stakeholders were involved in the development of the policy but were not involved in its implementation. According to a NEPHWAN member,

“Whether it was a kind of research that was done by the ENR (DFID-funded Enhancing Nigeria's Response to HIV) project, which at that time, it included a lot of us. But after that time, we were not carried along because this workplace policy was supposed to be in place, implemented at every, uh, establishment, especially as it affects people that are living with, uh, HIV and AIDS.” (NEPHWAN 3).

In the private organization where they have their WPP, it was stated that.

“Everyone is involved. We all {management and staff} reviewed the policy together. There is full involvement of the management and staff, and adequate resources are provided for HIV implementation” (Private Org2).

Resources

Resource availability has also been a major determinant of the level of implementation of the policy. It limited the ability of AKSACA to print and provide enough copies of the policy to implementers.

“I can't remember if we had up to a hundred copies. It was limited by the amount of money that was available” (AKSACA 3).

Most government agencies and private organizations do not prioritize the HIV response implementation including the policy implementation.

“Nobody gives us anything for HIV work oh. Sometimes, during World AIDS day, some NGOs will come, (to support) but management will always say they don't have enough money” (Govt Min 1).

The private company which showed optimal implementation stated that they are provided adequate resources for their implementation.

“We are provided all the resources we require for HIV awareness and implementation of this policy among staff.” (Private Org 2).

Leadership

Also explored was the quality of leadership provided for the policy implementation in the organizations. For instance, the issue of stigma and discrimination by other staff against a staff known to be living with HIV and the leadership actions to ensure PLHIV were not stigmatized. The leadership type was more of avoidance instead of taking decisive actions to prevent stigmatization of a PLHIV.

“No. How will they stigmatize her if they don't know? What I did was to move her to the bar. Not the restaurant, not in the kitchen so that she doesn't come in contact with food so that even if people know, they will not be afraid of getting infected.” (KII, Hotel manager U1).

Feedback

The State HIV workplace forum whose responsibility it was to drive the policy implementation through regular review meetings to harness & coordinate feedback, was yet to be constituted since the launch of the policy in 2014 [17]. The policy itself had no monitoring and evaluation framework and there was nothing instituted or done to obtain feedback on the policy implementation. It seems that the policy was developed to ‘tick the box,’ as nothing tangible was said to be done after it was launched. There was nothing to show that systems and structures for effective implementation of the policy were instituted.

“Since I came in, I don't think we've done much” (AKSACA 6).

Discussion

This study assessed the availability and level of implementation of HIV in the workplace policy in Akwa Ibom State, Nigeria and found that the Akwa Ibom HIV in the workplace policy was unavailable and its implementation was suboptimal across all seven domains assessed using the Policy Implementation Assessment Tool [23]. The tool was used as it outlines seven domains (policy availability, socio-political and economic context, leadership, stakeholder involvement, resources, operations, and feedback) that affect policy implementation in practice [23]. Ending HIV-related stigma and discrimination is central to the efforts to achieve the Global AIDS Strategy 2021–2026 and a policy environment that prevents access to justice is one of the enablers [14]. Inadequate resources is a recognized barrier to the implementation of health policy post-adoption [24]. In our setting, the availability of the AKS HIV WPP was lower (4.5%) compared to the evaluation of the HIV in workplace policy in the private sector in Zambia, where the policy was available in 36.7%

of the workplaces assessed [12]. Although the AKSACA disseminated the policy, the limited copies and lack of electronic copies affected the availability of this policy in our setting. For a policy to be implemented, the implementers of the policy should have good knowledge of the policy which should be available to both management and staff. The lack of knowledge on HIV among managers and stigmatizing practices within some organizations calls for urgent attention and buttresses the importance of effective dissemination and implementation of the AKS HIV WPP, as demonstrated in studies conducted in Nigeria and Zambia which showed that workplaces with HIV-in-the-workplace policies were more likely to implement HIV-related programs [10, 25]. A study in Thailand also demonstrated the positive effect of workplace AIDS policy on knowledge of HIV/AIDS [26].

Our findings show that the participation of decision makers in HIV-related programs was low and the resources allocated to support these activities was inadequate. This result is similar to that from a study in South Africa where 50% of respondents stated that their management's involvement in HIV programs in the workplace was low² and another study in Zambia also reported lower top management participation in HIV-related programs compared to employees [10, 11]. The low participation of the management team may also be responsible for the inadequate resourcing of the HIV-related activities in the workplace. The study in Zambia also reported that the low management involvement in HIV programs affected employees' motivation and involvement in the programs [10].

Another poorly executed area of policy implementation was the Operations domain. An HIV/AIDS committee is crucial for operationalizing HIV programs across organizations, as they are responsible for mobilization, assessing capacity gaps, coordinating the HIV response in the workplace, and to liaise with AKSACA, donors, and other government agencies [17]. It was also reported that committee members in South Africa also secured social protective rights on HIV/AIDS for employees in small and medium enterprises [27]. This committee was lacking in the majority of the organization assessed in our study and in its absence, HIV programs are either not implemented or implemented haphazardly based on unfounded fears and ignorance. This can also explain the rationale behind some unethical practices reported in some organizations including mandatory pre-employment HIV testing and termination of an employee's appointment based on their HIV status.

Results from our study support findings from another study in Nigeria, which reported that 24.8% of respondents believed that people living with HIV (PLHIV) should not be allowed to work with those who are not infected [28]. Similarly, a global survey found that 38.4%

of respondents held this view [28]. The reasons for these stances, similar to our setting, included the perceived need to protect other employees and clients from infection. This aligns with findings in the scoping review by Maulsby and colleagues that attributed fear of discrimination in the workplace as a common barrier to employment [29]. In West Africa, 28.9% of respondents shared this opinion, while in Eastern and Southern Africa, only 10.1% did—the lowest percentage [28]. The lower numbers in Eastern and Southern Africa were partly attributed to the high HIV prevalence in the region, where most workers are either infected or have a close relationship with someone who is, leading to a more accurate knowledge of HIV [28]. This calls for a deliberate effort to sensitize and educate the workforce on HIV/AIDS especially the mode of transmission.

The outcome of pre-employment HIV testing for employees is mixed. While most employers did not use the HIV test results to determine staff eligibility to work, employees did not benefit because their test results were not disclosed to them, thwarting both preventive and therapeutic actions based on their results. Such practices could lead to missed opportunities for linkage to antiretroviral therapy and comprehensive prevention services as well as delayed presentation with advanced HIV disease.

The AKS WPP also performed poorly in the Feedback domain as it lacked a feedback mechanism to harness implementation challenges from the implementers. This can be attributed to the ineffective dissemination of the policy and the absence of the State HIV workplace forum whose responsibility was to drive its implementation and coordinate feedback in our study setting [17]. This is in contrast to the study in Zambia where both internal and external mechanisms were used to monitor and evaluate the implementation of HIV-related programs in the workplace [30]. Policy advocacy and implementation have been identified as key pillars in the National Strategic framework for 2021–2025 and this must be strengthened if Nigeria is to achieve HIV epidemic control [31].

Conclusions

Our study found that the Akwa Ibom State HIV in the Workplace Policy (AKS WPP) was unavailable and its implementation was suboptimal in most of the organizations assessed.

Recommendations

We recommend that the Akwa Ibom State Agency for the Control of AIDS reviews and disseminate the State HIV in the Workplace Policy, leveraging technology such as electronic copies, to all organizations with more than five staff, as recommended by the ILO. The agency should establish a State HIV Forum, support organizations in instituting HIV Committees with functional desk officers,

facilitate training of managers and ensure regular feedback meetings are held. Additionally, they should advocate for and coordinate resource mobilization to support policy implementation in collaboration with all relevant stakeholders, especially PLHIV and their networks.

The review of the document should consider incorporating current development in this sector which includes the change in terminologies, the shift to people-centered HIV response implementation for more robust policy to achieve optimal implementation outcomes. Subsequent reviews should be conducted regularly as outlined in the policy and in line with global best practices that recommend that a policy document be reviewed every 4–5 years.

Further studies should be conducted to analyze the contents of the AKS HIV WPP in line with global best practices that require policies to have a monitoring and evaluation framework.

Limitations

To mitigate recall bias, participants for the Key Informant Interviews (KII) and Focus Group Discussions (FGD) who were employed around the time the Workplace Policy (WPP) was drafted and disseminated were selected. For the quantitative study, random sampling using the nominal roll of each organization as of September 2022 served as the sampling frame to minimize selection bias. A simple random sampling approach was used to select respondents within each organization in proportion to their population size. Purposive sampling was deployed to select employers and decision-makers for the FGD/KII, ensuring that these participants were excluded from the quantitative study. Although the qualitative study may not be generalizable, it provided clarity and context behind the suboptimal policy implementation, which can be utilized to commence the policy implementation improvement plan. It was also useful in reviewing the information gathered from the quantitative study and deepening the analysis.

Despite these limitations, the researchers strongly believe that the findings of the study are a true representation of the respondents' opinions. To the best of our knowledge, this is the first study to evaluate the implementation of the Akwa Ibom State HIV in the Workplace Policy, incorporating input from both employers and employees in the public and private sectors.

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
AKS	Akwa Ibom State
AKSACA	Akwa Ibom State Agency for the Control of AIDS
AKSWPP	Akwa Ibom State HIV in the Workplace Policy
ARV	Anti-Retroviral
ART	Anti-Retroviral Therapy
CSO	Civil Society organization
FGD	Focus Group Discussion

HIV	Human Immunodeficiency Virus
KII	Key Informant Interview
NEPWHAN	Network of People Living with HIV and AIDS in Nigeria
PEPFAR	President's Emergency Plan For AIDS Relief
PLHIV	People Living with HIV
SZ	Senatorial Zone
USAID	United States Agency for International Development
WPP	Workplace Policy

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Authors' contributions

HI conceptualized the study and drafted the first manuscript, EN co-drafted, edited, and proofread, AM, and PI conducted data analysis and reporting, EU and AM supervised the entire process. All authors read and approved the final version for publication.

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Data availability

The data that support the findings of this study are available from the researchers and can be shared by the authors upon reasonable request.

Declarations

Ethics approval and consent to participate

Ethical approval (AKHREC/18/05/22/094) was obtained from the Ethical Review Committee of the Akwa Ibom State Ministry of Health. Informed consent was obtained from respondents before engagement in the surveys, FGDs and KIIs. Permission to contact staff was obtained from the management of all organizations involved before staff were contacted for their consent. Participation was voluntary and at no cost to participants. For participants without formal education, the informed consent form was read and interpreted to them in the local language they were familiar with, before their participation. The questions were also explained to them in the local language, where necessary. Confidentiality was ensured throughout the processes by using codes for participants and the removal of all participants' identifiers from the tools. Participants were also informed about their rights to withdraw from the study at any time without fear of reprisal and interviews were conducted in locations that ensured audio-visual privacy to eliminate undue influence. Data collected for this research is kept in a locked cabinet, to be used solely for research, and will be destroyed six months after the conclusion of the study. Due to the COVID-19 pandemic that was still on, physical distancing was observed by the research team and participants. Face masks and hand sanitizers were provided for the research team and participants' use. All participants were treated with respect irrespective of race, creed or gender. Interviews were conducted in areas that were comfortable for the respondents and ensured their audio-visual privacy.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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