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Awareness and Knowledge of HIV in the Workplace Policy Among Employees, Employers, and Decision-makers in Akwa Ibom State, Nigeria

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Abstract

Human Immunodeficiency Virus (HIV) anti-stigma and discrimination policies are aimed at protecting the rights of persons living with HIV (PLHIV). In response to the stigma and discrimination experienced by PLHIV in the state, Akwa Ibom State, like many states in Nigeria, enacted the HIV in the Workplace policy (HIV_WPP). Despite its adoption, many PLHIV still experience stigma and discrimination in workplaces in the state. This study was undertaken to assess the level of awareness and knowledge of the HIV_WPP and related organizational policies in Akwa Ibom State across the private and public sectors. A cross-sectional study using a mixed methods approach was conducted for 591 consecutively recruited employees and 43 employers/ decision-makers across 23 organizations in the State. Data was collected from October 2022 to February 2023. Results were analyzed using SPSS 15.1 for quantitative and NVivo 10 for qualitative data. The study showed that 464 (78.5%) employees and 42 (95.3%) of employers/decision-makers, were unaware of the Akwa Ibom State HIV in the workplace policy (AKS_HIV_WPP). Also, 560 (94.8%) employees had poor knowledge of this policy. A larger proportion of respondents knew more about their organizational policies than the AKS_HIV_WPP. Older respondents (41.1% versus 37.5%, p=0.026) had significantly higher levels of knowledge of the policy. Three hundred and twenty-four (45.2%) respondents had good knowledge of their organizational policies. The awareness and knowledge of the AKS_HIV_WPP was suboptimal. It is recommended that relevant state agencies create awareness of the AKS_HIV_WPP in all public and private organizations through public-private collaboration.

Keywords: *Anti-stigma policy, Akwa Ibom State, HIV Stigma & Discrimination, Nigeria, Occupations, PLHIV.*

Introduction

In 2013, Nigeria, and nine other countries in sub-Saharan Africa accounted for 81% of all People Living with HIV (PLHIV) in the region [1]. In that same year, the level of HIV-related stigma and discrimination in Nigeria was about 46.8% [1]. HIV-related stigma and discrimination is a major impediment to the response across many settings including the workplace and constitutes a barrier to ending the AIDS epidemic by 2023 [2]. Studies have

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shown that stigma and discrimination present a major barrier to the success of HIV care and treatment programs globally [3-6]. In keeping with global standards and requirements in the implementation of HIV and AIDS-related services, the Nigerian government at the federal and sub-national levels has enacted or adopted several global policies including the HIV & AIDS Anti-discrimination Act [7]. However, in 2018, despite the availability of these policies, the level of stigma and discrimination against PLHIV increased to 51.8% [8].

Akwa Ibom State has one of the highest HIV prevalence in Nigeria (4.8%) based on the 2018 National AIDS Impact Indicator Survey (NAIIS) [9]. HIV-related stigma and discrimination was reported to be high with 60.5% of employees living with HIV in the state in 2012 unwilling to disclose their status to their employers for fear of being stigmatized [10]. In 2021, 53.5% of people hesitated to uptake HIV testing services due to fear of social stigma and 6.8% of PLHIV did not visit the hospital when in need of medical attention for fear of being stigmatized [11]. In a bid to reduce stigma and discrimination, the Akwa Ibom State government enacted the HIV in the Workplace policy in 2014 [12]. This was in addition to the creation of the Akwa Ibom State Action Committee on AIDS to coordinate the HIV response in the state in 2001 [12]. This committee was later transformed to the Akwa Ibom State Agency for the Control of AIDS. Despite having a Workplace Policy (WPP), there is no empirical evidence on the awareness, knowledge and effect of anti-HIV discrimination laws in Akwa Ibom State in particular and in Nigeria generally. It has been opined that Nigeria does not lack HIV-related policies and is almost up to date with relevant global policies [7]. The major gap seems to be in the translation of the policies to action to effect behaviour change. The knowledge-attitude-behavior model considers that knowledge is essential for effecting changes in behaviour and that individuals can obtain knowledge and skills through learning [13]. This model modifies human health-related behaviours by dividing changes into three continuous processes namely knowledge acquisition, belief generation and behaviour formation [14]. It has also been shown that improvements in knowledge have resulted in dramatic improvements in attitudes and behaviour [14].

Since the introduction of HIV in the Workplace Policy, there has been no assessment of the awareness and knowledge of this policy in the State. This study, therefore, sought to assess the awareness and knowledge of HIV in the workplace policy and related policies in both the private and public sectors in Akwa Ibom State. The specific objectives were:

1. To determine the level of awareness and knowledge of the AKS WPP in Akwa Ibom State
2. To determine the association between the socio-demographic characteristics of respondents and the level of awareness and knowledge of the AKS WPP.
3. To determine the association between the type of organization and the level of awareness and knowledge of the AKS WPP

Materials and Methods

Study Location

This study was conducted in Akwa Ibom State (AKS), located in the south-south geopolitical zone of Nigeria. The State have a population of approximately 5,482,200 in 2022 based on projections from the 2016 census [15]. Males constitute 50.8% of the population (2,770,590) [15]. More than half (59.4%) of the population are aged 15-64 years [15]. For over two decades, the State's HIV

prevalence rate has continually been higher than the national average [16]. Two population-based surveys namely, the Akwa Ibom AIDS Indicator Survey, 2017 and the National AIDS Indicator Survey, 2018 put the prevalence at 5.5% and 4.8% respectively making the state one of those with the highest prevalence rates in a nation whose current average is 1.4% [11,16]. The HIV infection in the state is generalized with females greater than 15 years of age accounting for 5.6%, while males of the same age range account for 3.7% of infection rates [17]. It is estimated that the state has about 178,000 PLHIV on Anti-Retroviral Therapy (ART) [11].

Study Design and Data Collection

A cross-sectional study using a concurrent, explanatory mixed-method approach was conducted. Pre-tested questionnaires were administered among employees to gather information on the level of awareness and knowledge of respondents on the State HIV in the Workplace policy and their organizational HIV-related policies and practices. Focus Group Discussions (FGD) and Key Informant interviews (KII) were conducted among employers and decision-makers to explore their perspectives on the same area.

Sample Size Determination

The sample size of 576 was determined based on the Fisher formula $n=z^2pq/d^2$ [17]. 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, a sample size of 576 was obtained. To account for non-response or poorly completed questionnaires, a 10% non-response rate was added based on lessons learned from a similar study [18]. A total of 591 respondents duly completed and returned their questionnaires. The staff strength across the organizations was used to determine the number of employees to participate in the survey and the staff were randomly selected using each organization's nominal role. Three (3) Focus Group Discussions (FGD) and 22 Key informant interviews (KII) were conducted in the qualitative arm based on the availability and willingness of senior staff of the organization to participate in the study.

Study Population and Sampling Technique

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) organization/establishments were assessed. A health facility and two government ministries were selected in each of the 3 senatorial zones by simple random sampling through balloting from the list of 8 public organizations statutorily tasked with the implementation of HIV in the state. From a pool of private organizations having a minimum of 5 staff in each senatorial zone, the same approach was utilized to select 4 organizations. Based on their unique role in HIV implementation in the state, the University of Uyo Teaching Hospital, (the only tertiary health facility in the state) and NEPHWAN, the umbrella network for PLHIV, were purposively selected. Proportional allocation based on the staff/membership strength of each organization as contained in the nominal roll of each organization was utilized to determine the sample size of each participating 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. Forty-three (43) people, which included 22 decision-makers and employers participated in the FGD/KII while

591 respondents participated in the quantitative arm of the study.

Study Instrument

A questionnaire was adapted with expert inputs to reflect the local context in line with the provisions of the Akwa Ibom State HIV in the Workplace [18]. The tool was pre-tested in organizations that were not participating in the study by trained research assistants and corrections were made on poorly understood sections before the final deployment of the instrument. The employee questionnaire had 9 questions to assess the awareness and knowledge of the AKS WPP and 7 questions to assess organizational HIV-related practices, making it a total of 16 questions. The completed questionnaires were reviewed for correctness and completeness and coded before being analyzed. Correct answers were scored 1 and incorrect answers were scored zero (0). 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 [19].

Data Collection

Data was collected for the quantitative and qualitative studies between October 2022 and February 2023. Seven research assistants who were recruited and trained on good ethical conduct and study instrument administration supported the principal researcher in data collection.

Analysis

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 inter quartile range were determined for numeric non-normally distributed data. The results were presented in tables and the data was analyzed using STATA version 15.1 (by StataCorp LLC, Texas, USA).

For the qualitative study, data from each session were digitally recorded and subsequently transcribed manually. The transcripts were carefully read, re-read and coded for thematic analysis using NVIVO 10 software (from Lumivero.com). A coding system was developed based on pre-identified and emerging themes and codes were assigned to the data. Recurring themes were identified with connections between data themes explored.

The outcome variable was the level of awareness and knowledge of the Akwa Ibom State HIV in the Workplace policy. Respondents with less than 50% of the total score were adjudged to have a poor level of knowledge while those with scores of 50% and above were accepted as having a good level of knowledge [18]. The chi-square test was used to determine the association between socio-demographic characteristics and the level of knowledge of Akwa Ibom State HIV in the Workplace policy (AKSWPP). The level of statistical significance was set at $P<0.05$.

The results were analyzed using statistical software packages – STATA version 15.1 and NVivo 10 for quantitative and qualitative data respectively.

Results

Of the 634 questionnaires shared to employees, 591 were correctly completed and returned. The majority of the respondents (353; 59.7%) were females and the mean age was 38 years (SD= + 8.8). Three hundred and fifty-six (60.2%) worked in government establishments and 218 (36.9%) worked in the private sector. Four hundred and eighty-one (481, 81.4%) of the respondents occupied non-managerial positions. Three hundred and thirty-three (333; 56.4%) were university graduates. Three hundred and eighty (64.3%) were of the Ibibio tribe and most respondents were Christians (589; 99.7%) (Table 1).

Table 1. Socio-demographic Characteristics of Respondents (n=591)

Variables	Frequency	Percent
Age (years)		
19 - 37	303	51.3
38-67	288	48.7
Age (mean+/-SD) =37.6+/-8.8 years		
Sex		
Male	238	40.3
Female	353	59.7
Respondents from various organizations		
Government	356	60.2
Non-Governmental	17	2.9
Private	218	36.9
Number of years in service (median (IQR) =5 (2-10)		
Work Position		
Managerial (non-decision-makers or employers)	110	18.6
Non-Managerial	481	81.4
Highest Level of Completed Education		
Primary education and below	10	1.7
Secondary education	81	13.7
Post-secondary education (non-university)	167	28.3
University	333	56.4
Tribe		
Ibibio	380	64.3
Annang	126	21.3
Oron	29	4.9
Igbo	27	4.6
Others	29	5.9
Religion		
Christianity	589	99.7
Islam and others	2	0.3

Awareness and Knowledge of the Akwa Ibom State HIV in the Workplace Policy

The awareness of the existence of the AKS WPP was poor as 464 (78.5%) of the 591 employees and 41 of the 43 employees/ decision-makers were unaware of its existence (Table 2).

Table 2. The State of Awareness of Employees and Employers/Decision-Makers of the AKS WPP (n=634)

Variables	State of Awareness of the AKS HIV Workplace Policy		Total
	Aware (%)	Unaware (%)	
Employees	127 (21.5)	464 (78.5)	591
Employers/decision-makers	2 (4.7)	41 (95.3)	43

The result from the qualitative study also noted that most participants had no awareness of the HIV workplace policy.

"For now, I'm not aware of that because normally when the government, um, adopts any policy, maybe from the federal government or any other notable organization, such a document is normally made available to the directorate so that the staff would be aware of it, and then it'll be easy to implement such policy. So right now, I'm not aware of that" (KII 1).

"I don't have an idea. It's supposed to be circulated...' Because I've worked here for the past almost two years now and I've not seen it. And it's not even in our library" (KII,3).

"I don't see any reason why they should not make it known. They're supposed to make it so that in every department, everywhere, everybody should be aware that so and so the policy is on grounds that will help people not to stigmatize people living with HIV and not to fear it. Because fear alone can make somebody not come out and take their tests. I think people will not be ashamed or afraid to come out and take their test." (KII,10).

Association between Selected Socio-Demographic Characteristics and Awareness of the Existence of the AKSWPP

The type of organizations respondents worked in was significantly associated with their awareness of the existence of AKS WPP ($p<0.001$). Most of those who were aware of this policy (67.7%) were those who worked with government establishments. Neither sex nor level of education was significantly associated with respondent's awareness of this policy (Table 3).

Table 3. Association Between Selected Factors and Awareness of the Existence of Akwa Ibom State HIV/AIDS Work Place Policy (n=591)

Variable	Awareness of AKSWPP		Total	Statistical test and p-value
	Yes n (%)	No n (%)		
Organization Type				
Government	86 (67.7)	270 (58.2)	356 (60.2)	$\chi^2=17.5$
Non-Governmental	9 (7.1)	8 (1.7)	17 (2.9)	$p<0.001$*
Private	32 (25.2)	186 (40.1)	218 (36.9)	
Sex				
Male	46 (36.2)	192 (41.4)	238 (40.3)	$\chi^2=1.104$

Female	81 (63.8)	272 (58.6)	353 (59.7)	p=0.294
Level of Education				Fishers Exact p=0.084
Primary and below	3 (2.4)	7 (1.1)	10 (1.7)	
Secondary	12 (9.5)	69 (14.9)	81 (13.7)	
Post-secondary (non-univ)	29 (22.8)	138 (29.7)	167 (28.3)	
University	83 (65.4)	250 (53.9)	333 (56.4)	

*=significant p-value

Knowledge of the Akwa Ibom State Workplace Policy

Generally, 560 employees (94.8%) had poor knowledge of the AKSWPP, and the median score was 0 out of a total of 6 points. Some respondents knew some aspects of the policy with only 2.7% of respondents knowing that the AKS WPP applies to both employers and employees. Furthermore, 4.7% of respondents knew that the AKSWPP is based on the principles of human rights, social justice, and gender equity. Four-point four per cent (4.4%) knew that the Akwa Ibom State Agency for the Control of AIDS (AKSACA) is the agency of government responsible for dissemination, and enforcement of implementation of the policy in the state and 3.7% knew that the policy prohibits unfair treatment and discrimination at the workplace. Forty-point-three percent (4.3%) knew that the policy makes provision for the monitoring and evaluation of the policy and 4.6% knew that the policy promotes HIV testing and counseling in workplaces (Table 4).

Table 4. Respondents' Knowledge of Akwa Ibom State Policy on HIV/AIDS (n=591)

Variable	Frequency	Percent
Who does AKS workplace policy on HIV/AIDS applies to		
All employers	10	1.7
All employees	4	0.7
Both employers and employees	16	2.7
Don't Know	561	94.9
AKS Workplace policy is based on the Principles of human rights, social justice, and gender equity		
Yes	28	4.7
Don't Know	563	95.3
Agency of government responsible for dissemination, enforcement of implementation of the workplace policy in the state		
AKSACA	26	4.4
SMOH	5	0.9

Don't Know	560	94.8
Current policy prohibits unfair treatment and discrimination at the workplace based on one's HIV/AIDS status		
Yes	22	3.7
No	9	1.5
Don't Know	560	94.8
Current AKS policy promotes HIV testing and counselling in the workplace		
Yes	27	4.6
No	2	0.3
Don't know	562	95.1
The Policy makes provision for the monitoring and evaluation of the organization's policy		
Yes	238	40.3
No	19	3.2
Don't Know	334	56.5
Level of Knowledge of AKS HIV/AIDS Workplace Policy		
Poor	560	94.8
Good	31	5.3
Median (IQR)= 0 (0-1)		

Respondents with a good level of knowledge were significantly older than those with poor knowledge of AKS HIV WPP (mean (s.d) 41.1+/- 9.7 years versus 37.5+/- 8.8 years, p=0.03). The sex of respondents, work position, type of organization, highest educational level, and tribe were not significantly related to the level of knowledge of AKS HIV/AIDS Workplace policy (Table 5).

Table 5. Association between Selected Factors and Awareness of the Existence of Akwa Ibom State HIV/AIDS Work Place Policy (n=591)

Variables	**Level of Knowledge of AKS HIV Workplace Policy**		**Total**	**Statistical tests and values**
	Poor	**Good**		
Sex				
Male	229 (40.9)	9 (29.0)	238 (40.3)	χ^2=1.72
Female	331 (59.1)	22 (71.0)	353 (59.7)	p=0.19
Age (in years)	37.5+/- 8.8	41.1+/- 9.7	37.6+/-8.8	P=0.03*
Work position				
Managerial	101	9 (29.0)	110 (18.6)	χ^2=2.35

	(18.1)			
Non-Managerial	459 (82.0)	22 (71.0)	481 (81.4)	P=0.13
No. of years in service	5 (2-10)	6 (4-15)	5 (2-10)	P=0.09
Organization type				Fishers Exact P=0.18
Government	335 (59.8)	21 (67.7)	356 (60.2)	
Non-Governmental	15 (2.67)	2 (6.5)	17 (2.9)	
Private	210 (37.5)	8 (25.8)	218 (36.9)	
Highest Edu Level				Fishers exact p=0.16
At least secondary	88 (15.7)	3 (9.7)	91 (15.4)	
Post sec (non univ)	162 (28.9)	5 (16.1)	167 (28.3)	
University	310 (55.4)	23 (74.2)	333 (56.4)	
Tribe				Fishers exact p=0.22
Ibibio	361 (64.5)	19 (61.3)	380 (64.3)	
Annang	120 (21.4)	6 (19.4)	126 (21.3)	
Oron	26 (4.6)	3 (9.7)	29 (4.9)	
Igbo	24 (4.3)	3 (9.7)	27 (4.6)	
Others	29 (5.2)	0 (0.0)	29 (4.9)	

*=significant p- value.

Generally, 324 (54.8%) respondents had a good level of knowledge of their organizational policy (Table 6). While 408 (69.0%) respondents knew that their organization had any policy that promotes staff health including allowing PLHIV extra time for their clinic visits, only two hundred and ninety (49.1%) were familiar with the content of their organizational policy. Seventy-four (12.5%) respondents affirmed that the state HIV workplace policy was streamlined into their organization policy. Twenty-five respondents (4.2%) posited that their organizational policy discriminates against persons infected or affected by HIV/AIDS. Two hundred and fifty respondents (42.3%) reported that their organizational policy provided confidentiality of an employee's HIV status and 230 (38.9%) respondents reported that their organizational policy encouraged the acceptance of PLHIV at the workplace (Table 6).

Table 6. Respondents' Knowledge of Their Organization's Policy as it Relates to HIV and Health in the Workplace (n=591)

Variables	Frequency	Percent
Organizations have any policy that promotes staff health (i.e. allows PLHIV extra time for clinic visits)		
Yes	408	69.0
No	58	9.8
Don't Know	125	21.2
Familiar with the content of your organization's policy		
Yes	290	49.1
No	301	50.9
Provision of state HIV workplace policy streamlined into your organization's policy		
Yes	74	12.5
No	106	17.9
Don't Know	411	69.5
Organizational policy discriminates against persons infected or affected by HIV/AIDS		
Yes	25	4.2
No	255	43.2
Don't Know	311	52.6
Organizational personnel policy provides for the confidentiality of an employee's HIV Status		
Yes	250	42.3
No	13	2.2
Don't Know	328	55.5
Your organizational policy encourages acceptance of PLHIV at the workplace		
Yes	230	38.9
No	18	3.1
Don't Know	343	58.0
Level of Knowledge of Organizational policy (total=6)		
Poor	324	54.8
Good	267	45.2
Median (IQR)= 1 (1-5)		

Discussion

This study aimed to assess the level of awareness and knowledge of the AKS Workplace Policy. The foundation for the implementation of a policy is the knowledge of its implementers among other factors. Globally, the enactment of HIV in the Workplace policy was a step in the right direction if the world is to achieve its desire to end AIDS by 2030. However, it is important to determine if the availability of the policy

translated to its awareness as it is unclear what implementers in the state know about the policy. This study, which was part of a larger study, sought to assess the awareness and knowledge of the State HIV in the workplace policy among workers in Akwa Ibom State, Nigeria.

The research showed that the level of awareness of this policy was poor as 78.5% of the employees and 95% of employers and decision-makers were unaware of the policy (Table 2). The level of awareness of the AKS WPP at $p<0.001$ was significantly related to the type of organization that a respondent worked in (Table 3). The awareness of the existence of the policy was better among those in government employment than those in private employment and non-governmental organizations. This may be attributed to inadequate dissemination of the policy to private sector organizations hence those within the government space would more likely have been aware of the document. This is similar to the findings in Zambia which reported a low level of knowledge of HIV in the workplace policy among private organizations in Zambia [20]. The implications are ominous as people in the private sector could continue to treat PLHIV unfairly. PLHIV in the private sector could continue to bear the brunt of the stigma in the workplace without knowing how to seek redress. The sex and level of education had no significant impact on the awareness of the WPP by respondents.

The level of knowledge of the policy was abysmally poor as 94.8% of respondents had poor knowledge of the document (Table 4). This is similar to a study conducted among PLHIV in India in 2011 where about 84% did not know the anti-stigma and discrimination policies [21]. A qualitative study conducted in Egypt also showed that the level of knowledge of anti-stigma policies was low [22]. The low levels of awareness and knowledge were substantiated by this study as the researcher was unable to find any copy of this document across all the places surveyed. Without the documents being available, respondents are unlikely to have any knowledge of its provision. Respondents with a good level of knowledge were significantly older than those with poor knowledge of AKS HIV WPP (41.1 versus 37.5, $p=0.03$). This corroborates another study in Nigeria which reported low comprehensive HIV knowledge among young adolescents as about 81.5% of them reported having stigmatizing tendencies towards people living with HIV [16]. It also corroborates a study in Uganda which also found that older persons were more likely to have good knowledge of the policy than younger persons [23]. The level of knowledge of respondents in this study could be linked to their years in service. Older workers were more likely to have been in government service in 2014 when the policy was disseminated, unlike younger workers. This indicates a knowledge transfer gap between the older and newer staff. The fact that since the initial launch and dissemination of the policy, there have been neither further reprints, sensitization of the workforce, nor review/ analysis of the policy performance, almost a decade after underscores this dearth of knowledge and information.

The provision in the policy that was known by many (40.3%) respondents was that it made provision for the monitoring and evaluation of its implementation. Incidentally, while this was stated in the policy, there was no provision of a framework for its actual implementation so this knowledge could have been inferred by respondents from their knowledge of what policies of this nature should naturally provide for. Furthermore, 4.4% of respondents knew that the Akwa Ibom State Agency for the Control of AIDS (AKSACA) is the agency of government responsible for the dissemination, and enforcement of implementation of the policy in the state and 3.7% knew that the policy prohibits unfair treatment and discrimination

at the workplace. The least known provision of the policy (2.7%) was that the AKS HIV/AIDS Workplace Policy (AKS WPP) applied to both employers and employees. The poor knowledge of this policy is similar to that in the qualitative study in Malawi where it was shown that most respondents had poor knowledge of the district of Nkhotakota's HIV & AIDS workplace policy [24]. The implication of the poor level of knowledge of the role of AKSACA is that the agency may be unable to get the relevant support and funding it requires to support PLHIV to access better services, free from stigma and discrimination. This has dire consequences if the state must reduce HIV prevalence rates.

Of note in this study was that while most respondents had poor knowledge of the State HIV anti-discrimination policy, 69.0% of respondents worked in organizations that had some policies with some provisions that promoted staff health and well-being (Table 6). While 49.1% of respondents were familiar with the contents of their organizational policy, a little less than half (45.2%) of the respondents had good knowledge of their organizational policies. This may be attributed to the availability of organizational policies to the workers. The availability of policies that support staff health in many organizations is a veritable structure for AKSACA and other support ministries, departments, and agencies to leverage to highlight and promote the AKS HIV WPP. A study across four low and medium-income countries supports the foregoing as it showed that the availability of a workplace policy and organizational quality assurance initiatives would assist in the reduction of the incidence, prevalence, and morbidity of HIV/AIDS [25].

Various studies have shown that improved knowledge of citizens about HIV was one of the most significant predictors of increased uptake of HIV intervention services [3,5,26]. Other studies have shown that increased levels of stigmatization and discrimination against PLHIV were most likely to negatively impact the uptake of HIV services [5, 6, 22]. For a state with one of the highest HIV prevalence in Nigeria and where 16.5% of PLHIV had reported being stigmatized in 2020, a lot needs to be done [26]. Collaboration with the media to discuss the policy, with the opportunity for citizen engagement is one of many ways to improve the awareness levels. Strengthening monitoring systems for policy implementation utilizing internal and external mechanisms would also be useful. Periodic independent surveys can be used to evaluate the status of policy implementation. The private sector should be more actively engaged.

Conclusion

The awareness and knowledge of the Akwa Ibom State HIV in the Workplace policy was sub-optimal. The awareness and knowledge of organizational policies and their contents were comparatively better. It is strongly recommended that AKSACA collaborates with various organizations in both the public and private sectors to improve awareness creation and monitor the implementation of this policy. With the existing levels of awareness and knowledge of organizational policies by the workforce, AKSACA should collaborate with organizations/establishments to mainstream the provisions of this anti-discrimination policy into organizational policies. This is premised on the fact that many of these organizational policies have some elemental health bedrock that the provisions of the state HIV in the Workplace policy can be built on or integrated into.

Declarations

Ethical Issues

Ethical approval (AKHREC/18/05/22/094) was obtained from the Ethical Review Committee of Akwa Ibom State Ministry of Health and informed consent was obtained from respondents before engagement in the surveys, FGDs and KIIs. Consent for staff

participation was sought from the management of all organizations involved and participation was voluntary and at no cost to participants. 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 sanitisers were provided for the research team and participants' use. All participants were treated with respect irrespective of race, creed or gender.

Conflict of Interest

The authors declare that they have no competing interests.

Authors' Contribution

HI conceptualized the research idea, funded, conducted the research and wrote most of the manuscript. AM provided expert inputs to the research tools, analyzed the data, and supervised the research while EN wrote part of the manuscript, and edited, and proofread the manuscript. PI edited and proofread the manuscript while the EU supervised the entire research. All authors read and approved the final manuscript.

References

[1] UNAIDS (2014) The Gap report 2014 https://files.unaids.org/en/media/unaids/contentassets/documents/unaids publication /2014/UNAIDS_Gap_report_en.pdf.

[2] UNAIDS (2023) Global partnership for action to eliminate all forms of HIV-related stigma and discrimination. https://www.unaids.org/sites/default/files/media_asset/global-partnership-hiv-stigma-discrimination_en.pdf.

[3] Golub, S. A., Gamarel, K. E., 2013, The impact of anticipated HIV stigma on delays in HIV testing behaviors: findings from a community-based sample of men who have sex with men and transgender women in New York City, *AIDS Patient Care STDs*, 27(11), 621–7.

[4] Thapa, S., Hannes, K., Cargo, M., Buve, A., Aro, A. R., Mathei, C., 2017, Building a conceptual framework to study the effect of HIV stigma-reduction intervention strategies on HIV test uptake: a scoping review, *J Assoc Nurses AIDS Care.*, 28(4), 545–60.

[5] Sweeney, S. M., Mitzel, L. D., Vanable, P. A., 2015, Impact of HIV-related stigma on medication adherence among persons living with HIV, *Curr Opin Psychol*, 5, 96–100.

[6] Mhode, M., Nyamhanga, T., 2016, Experiences and impact of stigma and discrimination among people on antiretroviral therapy in Dar es Salaam: a qualitative perspective, *AIDS Res Treat*, 7925052.

[7] Odimegwu, C.O., Akinyemi, J.O., & Alabi, O.O., 2017, HIV-Stigma in Nigeria: Review of Research Studies, Policies, and Programmes, *Hindawi AIDS Research and Treatment Volume*, Article ID 5812650.

[8] UNAIDS (2017) Data Book https://www.unaids.org/sites/default/files/media_asset/20170720_Data_book_2017_en.pdf.

[9] NACA (2018) NAIIS National factsheet – Nigeria AIDS Indicator and Impact Survey, Available at https://www.naiis.ng/resource/factsheet/NAIIS.pdf. Accessed December 2020.

[10] Johnson, O.E., 2012, Social impact of HIV/AIDS on clients attending a teaching hospital in Southern Nigeria, *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 9(2), 47-53.

[11] NACA (2021) Nigerian People Living with HIV Stigma Index survey 2.0 Report- NACA

Nigeria https://naca.gov.ng/nigeria-people-living-with-hiv-plhiv-stigma-index-survey-2-0-report/ Accessed June 2023

[12] AKSACA (2014) The Akwa Ibom State HIV in the workplace policy, 2014. A publication of the Akwa Ibom State Action Committee on AIDS.

[13] Liu, L., Liu, Y. P., Wang, J., An, L. W., Jiao, J. M., 2016, Use of a knowledge-attitude-behaviour education programme for Chinese adults undergoing maintenance haemodialysis: Randomized controlled trial, *J Int Med Res.*, 2016 Jun, 44(3), 557-68, doi: 10.1177/0300060515604980, Epub 2016 Mar 7, PMID: 26951842; PMCID: PMC5536721.

[14] Rahbar, T., Garg, S., Tripathi, R., Gupta, V. K., Singh, M. M., 2007, "Knowledge, attitude, behavior and practice (KABP) regarding HIV/AIDS among pregnant women attending PPTCT programme in New Delhi, *J Commun Dis.*, Sep, 39(3), 179-84, PMID: 18697582.

[15] City Population (2022) Akwa Ibom State, Nigeria population statistics, Charts, Maps. https://www.citypopulation.de/php/nigeria-admin.php?adm1id=NGA00316. Accessed June 2022

[16] Badru, T., Mwaisaka, J., Khamofu, H., Agbakwuru, C., Adedokun, O., Pandey, S.R, & Torpey, K., 2020, HIV comprehensive knowledge and prevalence among young adolescents in Nigeria: evidence from Akwa Ibom AIDS indicator survey, *BMC Public Health*, 20, 45, https://doi.org/10.1186/s12889-019-7890-y.

[17] Fisher, A.A., Laing, J.E., Stoeckel, J.E., Townsend, J.W., 1998, Handbook for Family Planning Operations Research Design. *Population Council*, New York.

[18] Mabuza, C., 2011, Evaluation of the management of the HIV and AIDS workplace policy at Statistics South Africa. A dissertation submitted to the University of South Africa, Pretoria, http://hdl.handle.net/10500/5027 http://hdl.handle.net/10500/5027.

[19] Bhuyan, A., A. Jorgensen, S. Sharma, 2010, Taking the Pulse of Policy: The Policy Implementation Assessment Tool, Washington, DC, Futures Group, Health Policy Initiative, Task Order 1. Accessed Aug 2022.

[20] Chatora, B., Chibanda, H., Kampata, L., & Wilbroad, M., 2018, HIV/AIDS workplace policy addressing epidemic drivers through workplace programs, *BMC Public Health*, 18, 180 https://doi.org/10.1186/s12889-018-5072-.
HIV/AIDS workplace policy addressing epidemic drivers through workplace programs.

[21] People Living with HIV Stigma Index: India Report (2011) https://www.aidsdatahub.org/sites/default/files/resource/plhiv-stigma-index-india.pdf. Accessed June 2023

[22] Hewko, S. J., Cummings, G. G., Pietrosanu, M., Edwards, N., 2018, The Impact of Quality Assurance Initiatives and Workplace Policies and Procedures on HIV/AIDS-Related Stigma Experienced by Patients and Nurses in Regions with High Prevalence of HIV/AIDS, *AIDS Behav.* Dec, 22(12), 3836-3846, doi: 10.1007/s10461-018-2066-9. PMID: 29476436; PMCID: PMC6208913.

[23] Oloya, P., 2009, Uganda Implementation of Workplace HIV/AIDS Policies In Private Institutions In Uganda Case Study Of Reproductive Health Uganda And Uganda Telecom Limited; Post graduate dissertation. http://ir.umu.ac.ug/xmlui/handle/20.500.12280/833.

[24] Mbulaje, P., Muula, A., 2020, Evaluation of HIV and AIDS Workplace Policy at Nkhotakota District Council, Malawi, Preprints. https://doi.org/10.20944/preprints202004.0493.v1

[25] Thapa, S., Hannes, K., Cargo, M., Buve, A., Peters, S., Dauphin, S., Mathei, C., 2018, Stigma reduction in relation to HIV test uptake in low- and middle-income countries: a realist review, *BMC Public Health*, 18, 1277, Published online 2018 Nov 20. doi: 10.1186/s12889-018-6156-4.

[26] Ekpo, A., Nja, G., Mkpong, U., 2020, Final report on gender analysis and HIV stigma index study in Akwa Ibom and Cross River States conducted by Center for Clinical Care and Clinical Research (CCCRN). https://www.researchgate.net/publication/348740627_Accessed June 2023.