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STATUS OF HIV TESTING SERVICES AND COMPETENCY LEVEL OF HIV TESTERS AND COUNSELORS IN PRIMARY HEALTH CARE CENTERS IN IBADAN METROPOLIS, OYO-STATE, NIGERIA

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ABSTRACT
Uptake of HIV testing services has been poor and statistics show that HIV has spread extensively in urban and rural areas of Nigeria with a person becoming infected with HIV every minute. Poor quality of care is one of the most common reasons why clients would not choose to use available health services. This study therefore explored the status of HIV testing services and competency level of HIV testers and counsellors in primary health care centres in Ibadan Metropolis, Oyo-State, Nigeria.

This was a descriptive cross-sectional study. A four-stage sampling technique was used to select health workers from PHCs and semi-structured questionnaire and observational checklist were used for data collection. HCT sessions by counsellor testers were observed, and questionnaires were self-administered among other health care providers. Quantitative data were analysed using descriptive statistics.

Respondents' mean age was 36.14 ± 12.58 years. Observational checklist revealed that 93.3% of the respondents had poor interpersonal relationship, 100% had poor pre-test counseling practice and good HIV testing practice. Majority (80.0%) of the respondents had good handling and disposal of contaminated items practice and 80% had low competency level. From the questionnaire, it was reported that insufficient consumables, insufficient staff, no privacy, low quality services were some of the challenges affecting HIV testing services as stated by 56.4%, 25.5%, 12.8%, 10.6% of the respondents.

This study revealed that primary health care centers have pre and post-test HIV counseling services but inadequate counseling rooms to effectively achieve the best result of the available counseling services. Majority of the HIV testers and counselors had low competency level. Government and non-governmental organisations should play active role in training HIV testers and counselors and provide all resources needed to ensure effective HIV counselling and testing services in Primary Health Care centers in Ibadan Metropolis.

KEYWORDS: HIV, Primary Health Care centres, HIV testing services, Health care providers.

1 INTRODUCTION
In order to create access to individual for voluntary testing, 1,064 health facilities at 2010 were providing HIV Counseling and Testing (NACA, 2010). The National Strategic frame work II developed for HIV/AIDS response in Nigeria has two key HCT objectives; (a) at least 80% of adults accessing HCT services in an equitable and sustainable way by 2015 and (b) at least 80% of most at-risk-populations accessing HIV counseling and testing by 2015 in order to scale up the provision of HCT particularly for young people (NSF II, 2010-2015).

Only 32% of infected persons in Sub-Saharan Africa were on ART as at December 2012 (Joint United Nations Programme on HIV/AIDS, 2015), and this region accounts for two-thirds of all HIV-infected persons worldwide. Globally, many people diagnosed with HIV infection are not linked to treatment and care (WHO, 2013). In resource-limited settings, primarily sub-Saharan Africa, it is estimated that as much as 40% of people who are diagnosed through HIV testing services are not linked to care (Rosen & Fox, 2011; Kranzer et al., 2012; Staveteig et al., 2013).

HIV testing services in health centers are expected to play a major role in HIV treatment cascade. The goal of HIV treatment cascade is minimal HIV in the blood stream of an infected person. In order to achieve the goal of HIV treatment cascade, people living with HIV need to be diagnosed on time, receive antiretroviral treatment (ART) quickly, continuously engage with medical services, adhere to medication, and have any difficulties with treatment appropriately managed. Health centers with weak HIV testing services system will have issues achieving this. Therefore, there is a need to assess status of HIV testing services and competency level of HIV testers and counselors at primary health care facilities in Ibadan metropolis, Ibadan, Nigeria.

2 METHODOLOGY

2.1 Study Design

A cross sectional descriptive design was used to explore status of HIV testing services and competency level of HIV testers and counselors in primary health care centers at the primary health care facilities in Ibadan metropolis, Ibadan, Nigeria. Quantitative research tool (Observational checklist and questionnaire) was used to collect data from healthcare providers.

2.2 Study Area

The study area for this project was Ibadan, Nigeria. The population of Ibadan as at 2007 was estimated to be 3,847,472. Politically and administratively, Ibadan municipality is divided into 11 Local Government Areas (LGAs). There are six rural LGAs (Oluyole, Ona-Ara, Egbeda, Ido, Akinyele, and Lagelu) and five urban LGAs (Ibadan North, Ibadan North East, Ibadan North West, Ibadan South West and Ibadan South East). Ibadan is divided into three socio-economic and cultural zones, which cut across the LGAs: a traditional inner core, a transitional, and a suburban periphery. The inner core areas form the old part of the city, inhabited, for the most part, by people with a low level of education. These areas are highly congested and overcrowded, have few and poor roads, limited amenities, and many public health problems. The transitional area is an interface between the inner core and elite areas. The suburban periphery is described as the elite area, containing modern low-density residential estates, occupied by professionals and other high-income groups (Arulogun, Adelekan, Olaseha, 2012).

2.3 Study Population

The study population for this study were health care providers in primary health care facilities in Ibadan metropolis, Ibadan, Nigeria.

2.4 Sample size

The total number of health care providers of the primary health care facilities in five urban LGAs (Ibadan North, Ibadan North East, Ibadan North West, Ibadan South West and Ibadan South East) as at the time of collecting the information was 265 (based on the record from the officer in charge). Ibadan North= 68, Ibadan North East= 44, Ibadan North West= 41, Ibadan South West= 54, Ibadan South East= 58. The sample size for the study was calculated by using the sample size formula below:

$$\frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

N= population size=265
e= Margin error (percentage in decimal form) = 0.05
z= the standard normal deviation which corresponds to the 95% confidence level (1.96)
p= estimate of key proportion (19.0% or 0.19). This prevalence is derived from a similar study titled (HIV/AIDS in Oyo State, Nigeria: Analysis of spatial pattern of prevalence and policy implication for government, Oseremen and Alexander, 2016)
n = 124.967
The calculated sample size was 125.
To enhance the precision and generalizability of the results, the sample size was increased to 135

2.5 Sampling Procedure

A four stage sampling technique was used to select respondents for this study.
Stage 1: Eleven LGAs in Ibadan were stratified into rural and urban LGAs.
Stage 2: Urban LGA was selected using simple random sampling of balloting
Stage 3: Purposive sampling technique was used to select primary health centres in all the five LGAs in Ibadan metropolis.
Stage 4: Purposive sampling was used to select health care providers and counselors & testers in the PHC.
For the quantitative study, a total of three counselor testers were observed in each local government areas during HIV service provision while a total of hundred health care providers were administered questionnaires but only 94 were completed.

2.6 Instrument for Data Collection

Questionnaire

A self-administered questionnaire was developed and used to collect necessary information from the health care providers at the primary health care facilities. The questionnaire was developed by the researcher based on literature review with input from project supervisor. The questionnaire was used to collect information on the socio demographic data of the respondents, available HIV testing services at the primary health care facilities, barriers to effective HIV testing services and strategies for promoting HIV testing services at the primary health care facilities in Ibadan. The questionnaire comprised of both open and close-ended questions.

Observational Checklist

Observational checklist was developed and used to assess competency level of HIV testers and counselors at the primary health care facilities.

2.7 Procedure for Data Collection

The study was carried out with the assistance of four trained Research Assistants (RAs). The RAs were recruited and trained to ensure adequate understanding of the content of the study instruments as well as the data collection process and management. The trained RAs were involved in the pretest and this was done to provide them with practical experiences. Advocacy visits were made to the Medical Officer of health and the LACA manager of each local government area by the researcher, to obtain permission and access to the Primary Health Care centers in each Local Government Areas prior to the data collection. Respondents were identified and questionnaires were administered. The questionnaire was self-administered and was reviewed for completeness, accuracy and problems noted were resolved immediately after it was filled.

2.8 Validity of instruments

In order to ensure validity of the study instruments for data collection, quantitative instruments were reviewed by project supervisor and pretested among homogenous population in Oluyole LGA.

2.9 Reliability of Instruments

A pilot study was carried out in Oluloye local government Comprehensive Health Care facility. The reliability was calculated using the Alpha Cronbach's reliability test. The result was 0.76 which was interpreted as being reliable.

2.10 Data Management, Analysis and Presentation

2.10.1 Quantitative data

The completed copies of the observational checklist and questionnaire were serially numbered for control and recall purposes. Data collected were checked for completeness and accuracy on a daily basis. The quantitative data collected were collated, screened, scored and entered into computer. The Statistical Package for Social Science (SPSS version 21) was used for the analysis of the data. Descriptive statistics was used for the analysis. A 59 point competency scale was used to measure the competency level of respondents. A correct competency attracted one point while a wrong competency will attract zero. A score of 0-19points, 20-40points and 41-59points was considered as poor, fair and good respectively.

Each section under the competency scale were measured separately. Interpersonal relationship was measured on a 4 point scale, giving information on a 6 point scale, information collection on a 4 points scale, handling special conditions on a 4 point scale, pre-test counseling on a 11 point scale, HIV testing on a 4 points scale, Handling and disposal of contaminated material on a 5 points scale, post-test counseling and referrals on a 15 points scale and record and information system on a 6 points scale. A score of 0-1points and 2-4 points was considered as poor and good respectively for the 4points scale, a score of 0-2points, 3-6points was considered as poor and good respectively for the 6 points scale, a score of 0-7 points, 8-15 points was considered as poor and good respectively for 15 points scale, a score of 0-5 points, 6-11points was considered as poor and good respectively for 11 points scale and 0-2 points, 3-5 points was considered as poor and good respectively for 5 points scale.

2.11 Ethical Consideration

The study proposal was reviewed and approved by the Joint Ethical Review Committee of the Oyo State Ministry of Health, Ibadan, before the commencement of the study. Participation in the study was voluntary and there were no criticism of respondents who refuse to participate or wish to withdraw from the study. Regarding confidentiality, the researcher, with a written informed consent from the respondents, provided clear explanations to each respondent that shared information will be treated with utmost discretion and confidentiality; only the research supervisors had access to it. Regarding anonymity, the researcher used identification numbers to identify each respondent. The identification numbers were used for all respondents' forms. The research assistants were trained on how to treat respondents as an autonomous body, capable of making decision and should be respected.

3 RESULT

3.1 Socio-Demographic Information (Questionnaire)

Table 3.1 shows the socio-demographic characteristics of the respondents. The age of respondents ranged from 18-59 years with a mean of 36.14 ± 12.58 years. Many (38.3%) and 25.2% of the respondents were between ages of 18-28 and 39-48 years respectively. Almost all (91.5%) of the respondents had tertiary education, 29.8% were Muslims and 39.4% were single. Most (54.3%) have been working in their respective health centers for 1-5 years and 20.2% were Community Health Extension Workers. Less than half (38.3%) of the respondents have been working.

Table 3.1: Socio-Demographic Information (Questionnaire).

Socio-Demographic Characteristics	N	%
Age		
18-28	36	38.3
29-38	14	14.9
39-48	24	25.5
49-58	18	19.2
59-68	2	2.1
Religion		

Christianity	66	70.2
Islam	28	29.8
Level of education		
Primary	2	2.1
Secondary	6	6.4
Tertiary	86	91.5
How long have you been working in this health center		
Less than a year	27	28.7
1-5years	51	54.3
6-10years	12	12.8
11-15years	1	1.1
Above15years	3	3.2
Position		
Health assistant	8	8.5
Matron	3	3.2
Pharmacist	1	1.1
Community Health Extension Worker	19	20.2
Community Health Officer	7	7.4
Medical laboratory scientist	25	26.6
Monitoring and evaluation officer	3	3.2
Medical record officer	5	5.3
Public health officer	1	1.1
Registered midwife	1	1.1
Health information management officer	5	5.3
Marital status		
Single	37	39.4
Married	56	59.6
Divorced	1	1.1
If married, how many children		
0(none)	7	7.4
1 child	6	6.4
2 children	13	13.8
3 children	9	9.6
4 children	17	18.1
5 children	2	2.1
6 children	1	1.1
7 children	1	1.1

3.1.1 Socio-Demographic characteristic (Observational Checklist)

Table 3.1.1 shows the socio demographic characteristics of respondents observed. Few (6.7%) of the respondents were between the ages of 30-34 years. Majority (93.3%) of the respondent were married and majority (80.0%) were Christians. Majority (86.7%) of the respondents have been working in the health center for 1-5 years while few (6.7%) of the respondents had above 15 year experience.

Table 3.1.1 Socio-Demographic characteristic (Observational Checklist).

Socio-Demographic Characteristic	N	%
Age		
30-34 years	1	6.7%
35-39 years	2	13.3%
40-44 years	3	20.0%
45-49 years	2	13.3%
50-54 years	4	26.7%
55-59 years	3	20.0
Marital Status		
Single	1	6.7%
Married	14	93.3%
Religion		
Christianity	12	80.0%

Islamic	3	20.0%
Ethnicity		
Yoruba	15	100%
Education		
B.sc	10	66.7%
Masters	4	26.7%
Diploma	1	6.7%
Years working in the health center		
1-5 years	13	86.7%
6-10 years	2	13.3%
Years of experience		
1-5 years	10	66.7%
6-10 years	3	20.0%
11-15 years	1	6.7%
Above 15 years	1	6.7%

3.2 Status of the Available Testing Services

3.2.1 Available HIV testing services

All (100%) of the respondents reported that HIV testing services were available in their facilities. Almost all (98.9%) the respondents reported that pre-test counseling was available at their facilities, 94.7% reported that post-test counseling was available, 93.6% had coordination with laboratory services and 6.4% reported that there were no linkages to appropriate HIV prevention, treatment and care services in their facilities (Table 3.2).

Table 3.2 Available HIV testing services.

Variables	Yes (%)	No (%)
HIV testing services offered in health facility	94 (100)	0 (0)
HIV Testing Services		
Pre-test counseling	93 (98.9)	1 (1.1)
Post-test counseling	89 (94.7)	5 (5.3)
Linkages to appropriate HIV prevention, treatment and care services	88 (93.6)	6 (6.4)
Coordination with laboratory services	88 (93.6)	6 (6.4)

3.2.3 Basic Infrastructures

Table 3.3 shows the result of observations made on basic infrastructures across the centres. The result shows that all (100%) the facilities observed are equipped with chairs and tables, all (100%) had waiting areas for clients, but only some (20%) of the waiting areas have chairs and adequate space. Majority (86.7%) are well equipped accordingly to perform a test, but none (0%) of the facilities have adequate counseling room for HIV testing services, or door tags for privacy, while most (53.3%) had a spacious, ventilated and well lit rooms as their basic infrastructures.

Table 3.3 Basic Infrastructures.

Basic infrastructures	Yes (%)	No (%)
Adequate counseling room	0 (0)	15 (100)
Well lit room	8 (53.3)	7 (46.7)
Spacious	8 (53.3)	7 (46.7)
Ventilated	8 (53.3)	7 (46.7)
Privacy enabled	7 (46.7)	8 (53.3)
Equipped with chairs and tables	15 (100)	0 (0)
Equipped accordingly to perform a test	13 (86.7)	2 (13.3)
Presence of waiting area	15 (100)	0 (0)
Rooms and waiting area well maintained and clean	6 (40.0)	9 (60.0)
Adequate waiting area(chairs and space)	3 (20.0)	12 (80.0)
Information, education, and communication(IEC) materials	3 (20.0)	12 (80.0)
Signboards, signs, labels and directions for HCT rooms	3 (20.0)	12 (80.0)
Door tags used for privacy	0 (0)	15 (100)

3.3 Competency level of HIV testers and counselors

3.3.1 Tester/Counselor Interpersonal relationship

Majority (93.3%) of the respondents had poor interpersonal relationship. The observation made as regards interpersonal relationship between testers and clients shows that almost all (93.3%) the testers in the health care facilities did not greet clients before commencing the test, none (0%) introduced himself or

herself, none (0%) delivered any information as regards HIV, and only few (6.7%) engaged client in a discussion (Table 3.4).

Table 3.4 Tester/Counselor Interpersonal relationship.

Tester/counselor Interpersonal relationship	**Yes (%)**	**No(%)**
Greets clients	1(6.7)	14(93.3)
Introduces self	0 (0)	15(100)
Listens actively	1(6.7)	14(93.3)
Interpersonal Relationship	**Poor** 14 (93.3)	**Good** 1 (6.7)
Information Collection Engages in discussion	1(6.7)	14(93.3)
Rapt attention given to client	4 (26.7)	11 (73.3)
Uses appropriate and balanced question	1 (6.7)	14 (93.3)
Probes appropriately	0 (0)	15 (100)
Giving Information Seeks clarification about information given	0 (0)	15 (100)
Clear delivery of information	0 (0)	15(100)
Gives client time to take in all information and responds	0 (0)	15(100)
Has up to date knowledge about HIV	0 (0)	15 (100)
Repeats and reinforces important information given	0 (0)	15 (100)
Checks for understanding and misunderstanding	0(0)	15(100)
Summarizes what was discussed	0 (0)	15(100)
Giving Information	**Poor** 15 (100)	**Good** 0 (0)
Handling Special Conditions		
Accommodates language difficulty	3(20.0)	12(80.0)
Innovative in overcoming constraints such as time, space, Population	7(46.7)	8(53.3)
Manages client distress	5(33.3)	7(66.7)
Prioritizes issues to manage time	3(20.0)	12(80.0)
Handling Special Conditions	**Poor** 12 (80.0)	**Good** 3 (20.0)

3.3.2 Pretest counseling

All (100%) of the respondents had poor pre-test counseling practice. There was no (0%) assessment of client's knowledge on HIV and its mode of transmission, there was also no (0%) discussion of basic facts on HIV and AIDS or any explanation of HIV test process and results. Only few (6.7%) assessment of client's readiness for HIV testing was done (Table 3.5).

Table 3.5 Pre-test Counseling.

Pre-test Counseling	**Yes (%)**	**No (%)**
Reason for attending discussed	3 (20.0)	12 (80.0)
Assessment of client knowledge on HIV and mode of transmission	0 (0)	15 (100)
Correction of misconceptions	0 (0)	15 (100)
Exploration of personal HIV risk behavior and options for reducing risk	0 (0)	15 100
Basic facts on HIV and AIDS discussed	0 (0)	15 (100)
Explanation of HIV test process and results	0 (0)	15 (100)
Discussion of Benefits and Potential difficulties	0 (0)	15 (100)
Discussion of HIV positive result and negative result	0 (0)	15 (100)

Exploration of support systems and discussion of disclosure mechanism	0 (0)	15 (100)
Assessment of clients' readiness for HIV testing	1 (6.7)	14 (93.3)
Obtained inform consent for HIV testing	1 (6.7)	14 (93.3)
Pre-test counseling	**Poor** 15 (100)	**Good** 0 (0.0)

3.3.3 HIV Testing

All (100%) the respondents had good HIV testing practice. The result of the observation made on HIV testing in the facilities shows that all (100%) made use of rapid test technique for testing, and they all (100%) used correct testing algorithm, with uninterrupted supply of test kits, and most (53.3%) do not make use of ELISA technique for testing (Table 3.6).

Table 3.6 HIV Testing.

HIV testing		
Rapid test technique used for testing	15 (100.0)	0 (0)
ELISA technique used for testing	7 (46.7)	8 (53.3)
Correct testing algorithm used	15 (100.0)	0 (0)
Uninterrupted and adequate supply of rapid test kits in stock	15 (100.0)	0 (0)
HIV Testing	**Poor** 0 (0.0)	**Good** 15 (100)

3.3.4 Handling and Disposal of Contaminated items

Majority (80.0%) of the respondents had good handling and disposal of contaminated items practice. All (100%) the facilities observed had waste disposal system, and all (100%) had hand gloves available for use, but some (33.3%) do not place used test kits and blood contained materials in a separate biohazard bag, some (33.3%) do not also have sharp bins sealed when container is three-quarter full (Table 3.7).

Table 3.7 Handling and disposal of contaminated items.

Handling and Disposal of Contaminated items	**Yes (%)**	**No (%)**
Presence of hygiene waste disposal system	15 (100.0)	0 (0)
Availability and use of hand gloves	15 (100.0)	0 (0)
Sharps are places in designated sharps disposal container	12 (80.0)	3 (20.0)
Sharp bins are sealed when the container is three-quarter full	10 (66.7)	5 (33.3)
Used test kits and blood contained materials are placed in a separate bio-hazard bad	10 (66.7)	5 (33.3)
Handling and disposal of contaminated items	**Poor** 3 (20.0)	**Good** 12 (80.0)

3.3.5 Post Test Counseling and Referrals

All (100%) the respondents had poor post-test counseling and referrals. None (0%) of the facilities have long waiting hours for test results, all (100%) test results were given the same day, but none (0%) discussed the meaning of the result with the clients, and majority (86.7%) did not check for the client's understanding of test result (Table 3.8).

Table 3.8 Post Test Counseling and referrals.

Post Test Counseling & Referrals	n	%
Long hours of waiting for test result	15 (100.0)	0 (0)
Test results given same day	15 (100)	0 (0)
Checking for client understanding of test result	2 (13.3)	13 (86.7)
Discussion of the meaning of the result with the clients	0 (0)	15 (100.0)
Discussion of personal, family and social implication	0 (0)	15 (100.0)
Condoms supplied where appropriate	0 (0)	15 (100.0)
Information on staying safe	0 (0)	15 (100.0)
Follow up plans discussed for window period	0 (0)	15 (100.0)
If positive result		
Managing emotional reactions	0 (0)	15 (100.0)
Discussion on who to tell and how to tell them	0 (0)	15 (100.0)
Information on avoiding spreading the virus to others	0 (0)	15 (100.0)
Referral system in place and functioning	0 (0)	15 (100.0)
Referral directory/list available	0 (0)	15 (100.0)
Designated referral site for care and support	0 (0)	15 (100.0)
Follow up plans and referrals discussed	0 (0)	15 (100.0)
Post-test counseling and referrals	**Poor** 15 (100)	**Good** 0 (0)

3.3.6 Record and Information system

All the respondents had good record and information system. All (100%) had uninterrupted and adequate supply of VCT data form, alongside anonymous coding for clients and accident/incident book. Majority (80.0%) of the counselors are assigned to non-VCT services and most (66.7%) counselors see more than ten clients in a day (Table 3.9).

Table 3.9 Record and Information system.

Record and Information system	Yes (%)	No (%)
Uninterrupted and adequate supply of VCT data forms and client cards	15 (100)	0 (0)
System for anonymous client coding in place and functioning	15 (100)	0 (0)
Accident/incident book available and used	15 (100)	0 (0)
All forms are checked for missing items at the end of each day	6 (40.0)	9 (60.0)
Counselors working scheduled hours (not assigned to other non-VCT services)	3 (20.0)	12 (80.0)
Each counselor sees <10 clients/day?	5 (33.3)	10 (66.7)
Record and information	**Poor** 0 (0%)	**Good** 15 (100%)

3.3.7 Competency level of health care providers

Majority (80%) of the health care providers have low competency level. Few (20%) of the health care providers have fair competency level.

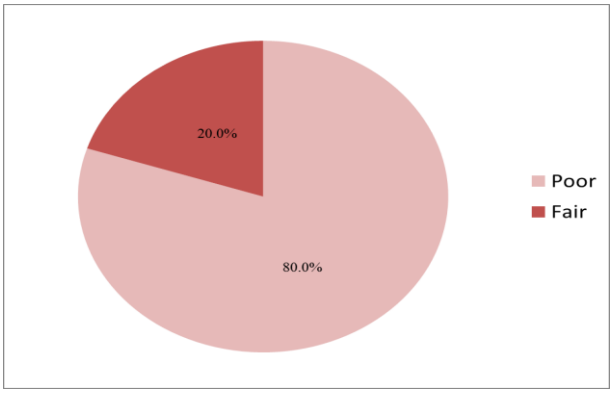

Fig. 4.2 Competency level of health care providers.

3.4 Barriers to Effective HIV Testing Services

Table 3.10 shows barriers to effective HIV testing services. Insufficient consumables, insufficient staff, no privacy, low quality services were some of the challenges affecting HIV services that were stated by 56.4%, 25.5%, 12.8%, 10.6% of the respondents respectively. Majority of the respondents interviewed reported inadequate consumables, infrastructures and staff as major challenges influencing effective HIV testing services.

Table 3.10 Barriers to Effective HIV Testing Services.

VARIABLES	N	%
Challenges affecting HIV services		
Refusal of patients to come for test and drugs	8	8.5
Insufficient staff	24	25.5
Insufficient consumables	53	56.4
No privacy	12	12.8
People don't want to get tested	4	4.3
Lack of cooperation with healthcare	1	1.1
Inadequate training on pre and post counseling	1	1.1
Lack of best knowledge on those that are affected	3	3.2
No compliance on the path of the patients	1	1.1
Insufficient space	6	6.4
Low quality services	10	10.6
No voluntary participation	2	2.1
What do clients/patients complain about when HIV testing is offered		
No privacy	5	5.3
Fear of knowing status	44	46.8
Lack of knowledge	16	17.0
Stigmatization	11	11.7
Anxiety	7	7.4
Difficulty in disclosure to partner	8	8.5
Lack of time	2	2.1
Embarrassment	5	5.3
Pain of pricking	13	13.8
Die young	1	1.1

3.5 Strategies for Promoting HIV Testing Services

Table 3.11 shows the strategies for promoting HIV testing services. More awareness, in-depth counseling, more consumables, were stated as strategies for promoting HIV testing services by 53.2%, 42.6%, 33.0 of the respondents, respectively. Many of the KII respondents recommended community sensitization, more provision for consumables, drugs and kits as strategies for promoting HIV testing services.

Table 3.11 Strategies for promoting HIV Testing services.

VARIABLES	N	%
Perceived strategies for promoting HIV testing services in this facility		
More staff	10	10.6
More consumables	31	33.0
More awareness	50	53.2
Privacy and a very big building	10	10.6
In-depth counseling	40	42.6
Free treatment including free drugs	20	21.3
HIV test should be done for every patients including immunization and before and after birth	8	8.5

4 DISCUSSION

The age of respondents ranged from 18-59 years with a mean of 36.14 ± 12.58 years. Almost all the respondents had tertiary education. This could be because the services rendered at the health care center cannot be professionally handled by someone with a level of education lower than that.

None of the primary health centers observed had adequate counseling room for HIV testing services, or door tags for privacy. This implies that majority of the clients who visited and will visit these primary health care centres will have privacy and confidentiality issues. This is in line with Ngangue, Gagnon, & Bedard (2017) study where only one PVTCC had enough and adequate counseling rooms to insure privacy and confidentiality during counseling sessions. If the main aim of needing counseling rooms during HIV testing and counseling, privacy and confidentiality, is not achieved, it ends up rendering the counseling session futile. The lack of counseling rooms for HIV in the primary health centres could be as a result of the present condition of PHC facilities in Nigeria. According to Chinawa (2015), most of the primary health care facilities in Nigeria lack the capability to offer essential health-care services, have poor staffing inadequate equipment, poor distribution of health workers, poor quality of health-care services, poor condition of infrastructure, and lack of essential drug supply.

Majority of the Primary Health Care facilities do not have Information Education and Communication materials. Information Education and Communication materials not only help in giving the client further information after living the health facility but also helps the client when there is language barrier. The lack of IEC materials could be as a result of low funding from the government and NGOs not partnering with certain Primary Health Care centers.

The observation made as regards interpersonal relationship between testers and clients shows that none of the testers and counselors introduced himself or herself, delivered any information as regards HIV and only few engaged client in a discussion before testing. Interpersonal relationship between the tester and the client goes a long way in making the client feel relaxed and there was no assessment of client's knowledge on HIV and its mode of transmission, there was also no discussion of basic facts on HIV and AIDS or any explanation of HIV test process and results.

Only few facilities assessed client's readiness for HIV testing. According to the Federal Ministry of Health Nigeria (2011), pre-test counseling session should contain basic facts on HIV and AIDS, discussion of benefits and potential difficulties, explanation of HIV rapid test process and meaning of HIV test results, exploration of personal HIV risk behavior and options for reducing risk including dual protection, assessment of clients' readiness for HIV testing, exploration of support systems and discussion of disclosure mechanism, obtaining informed consent for HIV testing. Almost all the facilities visited did not follow the guideline given by the Federal Ministry of Health during observation. This could be as a result of poor monitoring of HIV testers and counselors to ensure that the guidelines are followed by the testers and counselors

All the facilities made use of rapid test technique for testing and they all used correct testing algorithm, with uninterrupted supply of test kits. Despite the fact that Rapid test technique has made HIV testing faster and made test result known immediately (Constantine & Zink, 2005) it is also known for misdiagnosis. This is why health centres are to ensure quality assurance and confirm test result. A study done by Gray *et al.,* (2007) using three most commonly used HIV rapid diagnostic tests in Uganda revealed serious inaccuracies in rapid testing results. A total number of 129 persons who were tested positive with rapid diagnostic tests were actually negative after further tests were done of HIV status. In another study conducted in by the South African government in South Africa reported rapid HIV testing sensitivities of 68.7% in Cape Town clinics. This means that the test failed to detect HIV in some of the clients who have the virus (Wolpaw *et al.,* 2010). Also, rapid diagnostic test presented 98.8% specificity and 94.7% sensitivity resulting in 6 persons out of 100 receiving negative diagnosis instead of positive (Aghokeng *et al.,* 2009). Other studies also reported both false-positive and false-negative results (Johnson, Sands, Fonner, Tsui, Wong,Shanks, Klarkowski, O'Brien, 2013). It is a priority for ministries of health and national AIDS control programmes to implement robust quality

management systems that deliver high-quality and accurate reporting of HIV status (WHO, 2014).

Priority should therefore be given to the HIV testing and counselling services in Primary Health care centres. Heads of facilities should conduct routine monitoring of counselling session so as to ensure correct delivery of pre-test and post-test counselling information. IEC materials should also be made available to increase the level of knowledge of anyone who comes into the health centre on HIV. These should be done to help reduce the rate of HIV in our country Nigeria and encourage HIV testing and counselling.

REFERENCES

1. Aghokeng, A., et. al. 2009. Inaccurate Diagnosis of HIV-1 Groupe M and O is a Key Challenge for Ongoing Universal Access to Antiretroviral Treatment and HIV Prevention in Cameroon. PLUS One.
2. Chinawa JM. Factors militating against effective implementation of primary health care (PHC) system in Nigeria. Ann Trop Med Public Health, 2015; 8: 5–9.10.4103/1755-6783.156701
3. Constantine, N. and Zink, H. 2005. HIV testing technologies after two decades of evolution. *Indian Journal of Medical Research.* 121.4: 519 -538.
4. Federal Ministry of Health Nigeria. 2011. National guidelines For HIV Counseling and testing https://aidsfree.usaid.gov/sites/default/files/hts_policy_nigeria.pdf
5. Gray RH, Makumbi F, Serwadda D, Lutalo T, Nalugoda F, Opendi P, Kigozi G, Reynolds SJ, Sewankambo NK, Wawer MJ, 2007. Limitations of rapid HIV-1 tests during screening for trials in Uganda: diagnostic test accuracy study. BMJ 335: 188.
6. Johnson C, Sands A, Fonner V, Tsui S, Wong V, Obermeyer C et al. 2014. Are we delivering the wrong results?:examining misclassification of HIV status and false positive test results. Paper presented at: African Society for Laboratory Medicine; Nov 30—Dec 5; Cape Town, South Africa.
7. Joint United Nations Programme on HIV/AIDS.2015. How AIDS changed everything – MDG6: 15 years, 15 lessons of hope from the AIDS response. Geneva: *(http://www.unaidsorg/sites/default/files/media_asset/MDG6 Report_en.pdf)*
8. NACA, National Agency for the Control of AIDS, 2010. Fact sheet on prevention of new

a. infections in Nigeria. Available from http://naca.gov.ng/content/view/416/lang,en/

9. Ngangue, P., Gagnon, M. P., & Bedard, E. 2017. Challenges in the delivery of public HIV testing and counselling (HTC) in Douala, Cameroon: providers perspectives and implications on quality of HTC services. *BMC international health and human rights*, *17*(1): 9. doi:10.1186/s12914-017-0118-2
10. NSF II, National Strategic Framework, 2010-2015. Policy context and considerations for the development of the NSF ii
11. Rosen S, Fox MP. 2011. Retention in HIV care between testing and treatment in sub-Saharan Africa: a systematic review. *PLoS Med; 8(7): el 001 056.*
12. Shanks L, Klarkowski D, O'Brien DP. 2013. False positive HIV diagnoses in resource limited settings: operational lessons learned for HIV programmes. *PLoS One; 8(3): e59906.*
13. Staveteig S, Wang S, Head SK, Bradley SEK, Nybro E. 2013. Demographic patterns of HIV testing uptake in Sub-Saharan Africa. Calverton (MD): ICF International
14. Wolpaw, B., et. al. 2010. The failure of routine rapid HIV testing: a case study of improving low sensitivity in the field. *BMC Health Services Research.* 10: 73.
15. World Health Organization (2018). HIV/AIDS. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/hiv-aids
16. World Health Organization.2013.Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. Geneva: *(http://www.who.intlhiv/pub/guidelines/arv20i3/en?).*
17. World Health Organization. 2014. supplement to the consolidated HIV guidelines on the use of antiretroviral therapy: recommendations for a public health approach. Geneva:; 2014 *(http://www.who.intlhiv/pub?guidelines/arv2oi3/arvs20l3upplement_march20l4*