

Research Article

# The HIV Services' Milestone in Niger State: The Perception of the Frontline Providers

**Olabimpe Gbadeyan<sup>1,\*</sup> , Ebenezer Obi Daniel<sup>2</sup> , Adeola John Gbadeyan<sup>3</sup>,  
Oladele Abidoye<sup>3</sup>, Favour Okorie<sup>4</sup>, Joseph Clark<sup>3</sup>, Ahmed Mamuda Bello<sup>1</sup>,  
Michael Avwerhota<sup>5</sup>, Christiana Asibi-Ogben Inegbeboh<sup>1</sup>, Israel Olukayode Popoola<sup>6</sup>,  
Michael Olabode Tomori<sup>1</sup>, Adebanke Adetutu Ogun<sup>7</sup>, Oladapo Michael Olagbegi<sup>8</sup>**

<sup>1</sup>Department of Public Health, Texila American University, Georgetown, Guyana

<sup>2</sup>World Health Organization, Regional Office for Africa, Emergency Preparedness and Response Cluster, Brazzaville, Congo

<sup>3</sup>Department of Public Healthcare, Citizen Hospital, Suleja, Nigeria

<sup>4</sup>Department of Criminology, Alex Ekwueme Federal University, Ndufu Alike Ikwo, Nigeria

<sup>5</sup>Department of Public Health, Atlantic International University, Hawaii, United States of American

<sup>6</sup>Department of Epidemiology and Community Health, University of Ilorin, Ilorin, Nigeria

<sup>7</sup>International Organization for Migration, Abuja, Nigeria

<sup>8</sup>South African National Bioinformatics Institute, University of the Western Cape, Western Cape, South Africa

## Abstract

**Introduction:** On 1<sup>st</sup> December 2021, the Director General WHO during the world AIDS's day opening remark stated that, "the global HIV epidemic has faded from the headlines, but it is not over, far from it". Nigerian is among the countries that have the highest HIV infection burden, and more HIV babies than anywhere in the world. **Objective:** The study was embarked upon to understand the perception of the HIV service providers who are in the frontline, on the difficulties being encountered in the course of duty. **Method:** Qualitative Data was obtained from selected HIV service providers, who were rich in experience across the state, through in-depth interviews (IDI), focus group discussions (FGD), and a non-participant observation with checklist. Saturation was reached, coding was done manually and automatic with NVivo 14, and thematic analytic method used to get a good induction from the data. **Results:** Among the difficulties being encountered by the HIV service providers from the study were burnt out, staff shortage, training deficiency, secondary stigmatization, and poor remuneration; similarly, lack of incentives, inability to follow-up, language, and religion barriers. Insecurity, the diminished awareness on HIV prevention, frequent change of implementing partners and lack of political will by policy makers were other identified challenges of the HIV services in the state. **Conclusion:** All relevant stakeholders need to work together towards reducing the difficulties highlighted by the providers toward the HIV eradication strategy. Government should take full possession and ownership of HIV management in Niger state, and the country.

\*Corresponding author: [gbadeyan22@yahoo.co.uk](mailto:gbadeyan22@yahoo.co.uk) (Olabimpe Gbadeyan)

**Received:** 25 February 2024; **Accepted:** 11 March 2024; **Published:** 2 April 2024



Copyright: © The Author(s), 2023. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

## Keywords

HIV Services Providers, Perception, Niger State, Nigeria

## 1. Introduction

In west and central African sub-region, HIV is still a major public health challenge, Nigeria with its large population, has one of the biggest HIV epidemics in the sub-region, despite a relatively low HIV prevalence rate [1]. However, the country has made significant impact in the reduction of HIV infection; according to the latest Nigerian national HIV/AIDS indicators, and impact survey according to the Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS), the prevalence rate was 1.3% among 15-49 years old [2, 3] South Africa 19%, Zambia 11.5%, and Ghana, a neighboring country has prevalence of 1.7% [4]. The prevalence rate for women was 1.8%, men was 1.0%, the difference was found to be more pronounced in young female adult between 20-24 years, who are more than three times likely to be living with HIV, than their male counterpart. In children 0-14 years, the prevalence rate was 0.2%, viral suppression was 42.3%, and prevalence in 15-49 years, 34.5%. In 2018, 55% adults, 35% children were on antiretroviral treatment (ART), 53,000 AIDS related deaths, and 130,000 new HIV infections in the country, which has been described as one of the highest rates in Sub-Sahara Africa [2, 5]. In compare, prevalence among 15-49-year-old women and men living with HIV were South Africa 24.7% and 13.5%, Zambia 14.1% and 8.0%, Ghana 2.3% and 1.0% respectively [6].

A new global strategy, the Global AIDS Strategy 2021-2026, was adopted by UNAIDS to get every country, and community on track to end AIDS as a public health threat by 2030. It is hoped, if achieved, newly acquired HIV infections will decrease from 1.7 million in 2019 to less than 370,000 by 2025, and the number of people dying from AIDS related illness from 690,000 to less than 250,000; while, new infection is expected to drop from 150,000 to less than 22,000 in children globally [7].

In addition, to achieve the UNAIDS and its partners fast track strategy to bring HIV incidence, and mortality to 90% reduction by 2030 [8], it is imperative that people living with HIV must be identified early, and subsequent integration into HIV treatment. Early identification can be achieved through the unrelenting and effective activities of the HIV providers [8, 9]. One of the ways in which these gaps can be identified and addressed is by assessing the challenges and difficulty faced by HIV services providers during the delivery of these services.

In the journal of science, 3<sup>rd</sup> February 2022, researchers from Netherlands, led by Chris Wymant published the discovery of a new variant of HIV-1 found in the country in 109 individuals, the new variant has been described as been virulent, more transmissible and damaging, it is hoped, this new

entrant will not drawback the gain of the past decades, and the goal of bringing the pandemic to an end in 2030 [10].

In Nigeria, since the onset of the pandemic, the HIV financing has been international donors driven under the coordination of national agency for the control of HIV/AIDS (NACA) and implementing partners (IP) [11]. Niger State is one of state in the north central zone of Nigeria; it has a prevalence of 0.7% to occupy the 19<sup>th</sup> position, Akwa Ibom 5.5% (1<sup>st</sup>), Benue 5.3% (2<sup>nd</sup>), while Katsina came last at 0.3%. However, in the recent Bayesian modelling, the state prevalence estimate was 1.8%, midpoint of 1.2-2.3% lower and upper interval [12]. The sharing of borders with other terrorists' endemic states divulged the states to regular kidnappings, herdsmen and bandits' invasions. A call has been made to government and non-governmental organizations to intensify actions, and enact legislations, and policies that will lead to the reduction in the prevalence of HIV scourge in Niger state, and Nigeria at large.

In a feature story with the UNAIDS country directors, on who were the unsung heroes of the HIV epidemic in Nigeria [13], it is unfortunate the heroes mentioned did not include the HIV services providers who had been laboring, testing, treating, visiting and counseling the HIV clients; borne in their stigmas, discriminations, rejections and on whose necks many tears had been shed. In a nutshell, the HIV services providers are part of the client's stories, and voices, therefore, their challenges are worth listening to, as explored in this research.

## 2. Method

### 2.1. Study Design

A cross-sectional descriptive qualitative approach was adopted for the study. The IDI explored difficulties encountered during testing and counselling of different clients, occupational hazard, enabling and non-enabling factors. The enabling factors for the purpose of this study are factors whose presence, enable the HIV service providers to be satisfied and motivated, while the lack of such factors constitute challenges to the providers. The non-enabling factors on the other hand, are factors, the presences of which constitute challenges and dissatisfactions, while their absences lead to job satisfaction and good performance. The FGD elicited a wider perception of the participant's views on controversial areas regarding HIV

testing, newer innovations in the management of HIV; the on-going brain drain, insecurity wave in the country, and the context feasibility of HIV eradication strategic plan.

## 2.2. Sampling Technique

Purposeful sampling method was used to select participants, from private, public, rural, and urban facilities conducting comprehensive HIV services in Niger state. Selection was based on the recommendation of key informants; participants were providers who had worked for 5 years and above, with rich experience.

## 2.3. Data Collection and Analysis

The interviews were conducted in English, using the online Zoom platform, while Colibri, in-application software was used for the transcription; prepared topic guides were used to obtain a rich data, with a non-participant observational checklist. The participants were contacted through individual WhatsApp number, and initial rapport created, a convenient time suggested, and agreed upon, reminders messages were sent before the schedule time.

Data analysis started during the field work, and content analysis method was adopted. Iterative approaches on issues

employed, saturation point reached through exploitative, and probing until no new theme emerged. Editing was done severally, until all the transcribed data tally with the video and audio recordings, importation into NVivo 14 (March 2023) software was done for coding, sorting and indexing; coding was also done manual. Using the framework approach, themes, sub-themes, mappings, interpretations and explanations were obtained by looking for similarities, associations, and differences in the responses.

## 2.4. Ethical Consideration

Informed and voluntary consent form was presented to each participant, anonymity and confidentiality assured, standard and quality ethical procedures observed, without any form of coercion.

## 3. Results

15 IDI, and 2 FGD (4 and 7 participants each) were conducted, but only 13 IDI analysed because of poor internet connectivity and audio recordings (Table 1).

**Table 1.** Socio-demographic characteristic, Details of Methods, Facility Type & Location of Participants.

Method	Type of Participant	Total No	Gender	Location of Facilities	Type of Facilities
IDI	Selected HIV Service Providers Only	13	Female = 5	Rural = 5	Public = 9
			Male = 8	Urban = 8	Private = 4
FGD 1	Selected HIV Providers only	4	Female = 2	Rural = 2	Public = 3
			Male = 2	Urban = 2	Private = 1
FGD 2	Selected HIV Providers only	7	Female = 2	Rural = 3	Public = 5
			Male = 5	Urban = 4	Private = 2

## 3.1. In-Depth Interviews

### 3.1.1. HIV Services

*Roles and characteristics of the providers:* Participants were from health and non-health background, they include Advoc staff, medical laboratory scientists, HIV testing service optimizers, counselors/testers, case managers, pediatric nurses; mentor mothers, volunteers, data entry clerks, data analysts, retention staff, and ART coordinators among others. A high level of multi-tasking was discovered in the services they rendered.

From the interview, some expected characteristics of the

providers were demonstrated through reaction to the needs, death, and other negative situations of the clients, examples of which were praying, giving, visiting, putting themselves in the shoes of the clients, and friendship developed, just in the interest of the clients.

*“Ah, If I lose any client, I feel bad, because money has gone, services has gone, I show empathy, you know, they are my clients, so I feel sad. I show their family love and empathy, and make them know that yes, we are praying along with them, and also pray that God comfort them.”* (Participant 4)

*Testing and Counselling of Different Clients:* “Dey plenty ooo, hmm, it has not been easy.” This is the starting statement of a provider about the various challenges being faced in the course of the job. The providers usually come across diverse

clients, who included women, men, children, adolescent, commercial sex workers (CSW), educated and uneducated, etc. *Men and Women*: Majority of the participants agreed that women attend hospital more, and are easy to be counseled and initiated into treatment, compare to men who are more egoistic, and felt they are strong.

*"I think men are the most difficult specie, I have had one-to-one contact with them. A woman will come to the facility, after explaining everything, you will give her drugs, but you know a man, you find it difficult, he will always want to show you that he is a man, anything he says you must go with him."* (Participant 4)

*Pediatric, Adolescent, and Youth*: The challenges with babies and younger children are, mothers who refused consent for these minors to be tested, due to fear of the unknown; hiding of babies' status, because of stigma, and shame, and "unsuppressed viral loads" because of wrong method of drugs administration, resulting in babies vomiting the syrups. Difficulties with adolescence evolved at the age of reasoning, asking questions on reasons for the drugs and duration, source of infections, and why their mates are not taking the drugs, etc. Most of the youth on the other hand, had acceptance their status, as a consequence of past negative lifestyles, and now battling with stigma, adherence, getting supports and life partners, all of which the providers are deeply involved in most cases.

*"We have issues of serious caregivers, most are not really into investing that time in making sure that the babies stay healthy, then the adolescent, most of them stigma is also their major problem, because they cannot stand it among their peers, they would be the only one taking drugs."* (Participant 12)

*Elderly*: The difficulties with elderly were usually due to frustrations and being tired of taking the drugs, thinking they are close to death. Further probing revealed the providers usually follow-up these elderly clients, persuading them to continue the ART. *Commercial sex workers*: These were adjudged to be good clients in term of adherence, always trying to be close to the providers for advice and counselling, however, frequent mobility from one brothel location to another and sometimes inter-state is a challenge. The providers tried their best to keep in touch with them, when possible, through their phone numbers.

*Prevention of Mother to Child Transmission (PMTCT)*: Most women in the northern part of the country do not deliver in the hospital, the providers is thus faced with how to get the babies ART drugs across post-delivery. This is made worse since the household of most women are not aware of their HIV status.

*"How are you going to do it, if you put to bed? Who will collect drug for your baby? They will say there's nobody o, that they did not disclose their status to anybody."* (Participant 7)

*Educated and Uneducated clients*: The educated clients were described as easy to counsel and understand the in-

structions given, on the other hand, the challenges with the uneducated, are ignorance and difficulties about the disease, the treatment, need for adherence, etc., with some preferring death to taking the ART.

*"But if they're not educated, that is when we face most challenges."* (Participant 5)

*"In a week at times, I used to get like four or five of them that are reactive, and none of them will be placed on ART. (R: why?) Ignorance, they do not agree on their status, they preferred death instead of taken ART drugs, so, and that is the first challenge."* (Participant 9)

*Disclosure and Discordant couples*: In trying to explain the magnitude of the difficulty associated with couple disclosure, a participant captured it as *"It's not easy, it's not easy at all."* This is more pronounced in women, due to the fear of intimate partner violence (IPV), separation, divorce and other consequences, which some of the participants had witnessed, preventing third-party notifications, thus participants resulted to index and community testing where feasible. The men on the other hands usually preferred to pass the virus to their wives before disclosure, and accusing their wives of infidelity, while others go to marry new innocent brides.

*"Most of the male adult I have encountered, they don't like disclosure. They prefer at the time when they have infected the partner, then both of them will now come to the hospital, which will be a bit easier for them to disclose at that point in time."* (Participant 12)

### 3.1.2. Enabling Factors (Motivators)

*Training and Personal Growth*: The participants complained of the lack of formal training, majority learnt on the job, not deriving enough benefits from online trainings, and prefer reversion to the physical encounters; similar complaints about the "train-the-trainer" training approach were narrated.

*"Training is not coming often, most of the trainings that were done are virtual training, and it's not like it comes up often, maybe twice or once in a year. Sometimes we might not even have training at all, maybe, they just drop "pass-down materials", and say "okay, go and read". So, those they train will come down and pass-down, but the issue we have is that, most times those that were trained, don't really pass down the information the way it's supposed to be."* (Participant 2)

*Career growth, job security and promotion*: Lack of career growth, delayed promotions, and lack of job security, were identified as very frustrating, which some attributed to the "Nigeria factor", translating to knowing someone at the top. The challenges had made some intelligent providers to leave the job, others planning to migrate to other fields or leave the country; however, some believed things will get better.

*"There is nothing like promotion, we've been where we were, once you don't have anybody at the top, and you don't move. I have a colleague today that has left the work, these are brains, And the facts is that you cannot move with this work, so it cannot form a career for them, so they left."* (Participant 12)



**Remuneration and Human Resources:** All the participants equivocally agreed on poor salary, late payment, superiors being paid more than the facility Advoc staff that do most of the work, and staff shortage.

*"So, for the past three years, there was no addition."* (Participant 11)

*"We are just managing, workload everywhere. They're not ready to increase salary, or employ more staff, it has not been easy."* (Participant 7)

**Materials shortages:** There were insufficiency of working tools like test kits, gloves, non-availability of printers, X-ray and dried blood spot machines (DBS), etc., these sometimes lead to delay in the services being rendered, and loss of clients, who may not return to the facilities after a missed opportunity. When probed on how they usually managed the situation, some providers said, when it got so bad, they would purchase gloves with their personal money to render the services, with no hope of refund, or tell the clients purchase from the pharmacy. On the contrary, some facilities always have enough of the testing tools.

*"We normally use to run short of hand gloves, that's my biggest challenge...., we use our money, and when we don't have money, we tell the clients to just purchase it at the pharmacy."* (Participant 8)

*"I have about almost hundred DBS samples that I have collected, they have not picked them. If they picked, for results to come, it will not. So, they didn't give our facility the DBS machine."* (Participant 7)

**Working Environment:** Inadequate working space, lack of good basic office furniture, and having to share office with other non-HIV service providers were serious challenges of some participants.

*"But the challenges we have are working tools, now, talking about lockers, we need to put our files, documents, our registers, you know, we need a convenient environment where you have your own office to yourself, where people don't just walk in to say they want to pick one or two things, they want to wash their hands in the basin, sterilize, and all those things...., no good chairs."* (Participant 4)

**Electricity, Internet and Transport:** These enabling factors were reported as lacking in most of the facilities, the providers were often not reimbursed transport fare spent.

*"We don't have bulbs, so, when we have to work late in our facility, we have to turn on our phone, we don't have electricity, funny enough, we have A/C installed, but we don't have electricity."* (Participant 4)

*"The network is always bad, except when I come back to my base before I'll get access to the internet, and before I will be able to submit my reports or make communication...."* (Participant 2)

*"But now we have to use our own money for transportation to locate all those areas."* (Participant 3)

**Unionism:** None of the providers were aware of any association representing HIV service providers.

*"We don't belong to any union."* (Participant 6)

**Motivation, Achievements and Recognitions:** The providers were fulfilled in doing the job, despite no financial motivation. Making the clients happy, healthy, and bringing the pandemic to an end, were regarded as their primary motivation. A provider actually attributed being selected for the IDI as part of his achievement and recognition.

*"The job is challenging, but with zeal to meet up with the target, and making sure we control the pandemic or the endemicity of the virus has really keep me going. I am so happy having this interview with you because it's part of my achievements. I wasn't expecting to be selected, and be interviewed. It shows our work is actually speaking for us up there."* (Participant 6)

However, others were frustrated, with no motivation to continue the work.

*"Honestly, because the work is not motivating, I have been on the job for about eight to nine years now, but the people they employed last year, we are all earning the same salary."* (Participant 7)

**Home visit and follow up:** Challenges encountered in the course of home visit, are mostly associated with non-disclosure of client's status to their household, insecurity, lack of support for the clients, false addresses, wrong phone numbers, etc. Sometimes, the providers uses unconventional methods to get across to the clients through 'disguise', lying, arrangement to meet outside the clients' home, etc., in order to avoid exposing the client's status, and unpalatable consequence like separation, divorces and the likes.

*"Home visits is very difficult because .... people in this our northern part of Nigeria. You know, some of them they will say "Bashiga" (No entrance), our men cannot enter, is only female that will be able to enter, and being a female, you enter some houses they would disgrace you, they will tell you they don't know you, so before you can visit, you have to seek for their consent. But for those ones that accepted, most of the time we disguised like their far distance relatives that the husband might not even know."* (Participant 1)

**Allowances, Insurance, and Pension:** Only one participant was on health insurance, all the others were not on any insurance, or pension scheme, the mentioning of which was strange to some.

*"There's no health insurance, no hazard insurance, no pension, there's nothing, just your basics salary, and maybe data allowance, or call card allowance. Hmm, for now there is no support."* (Participant 2)

**Policy and guideline:** The majority of the participants were not happy about the frequent change of the IPs, each coming with different agenda, which sometimes differed from existing guideline; lack of rapport between the current IP and providers, and multiple questionnaires for the clients to answer. This usually affect the response of clients on why change in drugs brand, etc., which the providers must provide answers.

*"The policies change almost every day. Today you are given this policy, tomorrow its different, next tomorrow is*

another ball-game entirely. "Okay, do this, but now we want you to do this, later, according to the policy, it's not like that". So, let everybody follow a unified policy for HIV treatment." (Participant 2)

"The changing of organizations (IPs) is so frequent; each one will come with their own different way. So, how we are to present all those different changes to our clients is another thing again?" (Participant 11)

**Lack of organizational support for clients and the Providers Sacrifices:** Lack of adequate support for the clients was identified as a big dilemma for the providers, most often, providers used personal resources to care for the clients' urgent needs, which included transport fare, feedings, medications, laboratory investigations, blood transfusion, x-rays, etc. Although, these are not the functions of the providers, however, most clients depended on them. These assistances were sometimes secondary to failed IPs promises, thus, providers found themselves in tight positions when confronted with clients' helpless situations. Similarly, the support and peer forum meetings where clients and providers rubbed mind together, and burdens shared, had not been holding, due to non-provision of needed funds.

"From our pocket we do it, from our own pocket, yes... They might just say that you should invite the patients, they will give them transport, but mostly we used our own money to do it." (Participant 11)

"Sometimes, you see a person in front of your sweating, common sense required that you buy this person drink, cold drinks like Coke, right?" (Participant 4)

### 3.1.3. The Non-Enabling Factors (Demotivators)

**Burnt-out and Targets:** The stress of being an HIV service provider was agreed to be much, some had no time for other activities, others fall sick often, and in order to meet target, test kits were usually distributed to other outlets including motor parks, health post, drugstores, private clinics and communities.

"I managed about 100 clients as at then, although here, it was more, it was a little bit tasking, because I was working between two facilities, so the stress was kind of more to an extent here, there's no particular time for resting, there is nothing to relieve ones of the stress." (Participant 13)

"I know of a friend of mine now that's working with us who is always falling sick, as a result of pressure from the work, the work load is excessively much on the staff." (Participant 2)

**Occupational hazard and Secondary stigmatization:** There was admission of the risk to contract the virus, experience of harassment and attempted legal action by a disgruntled client's spouse, and discrimination, mostly by other health workers with the tag of "HIV person".

"I am also exposed to the risk of the virus..., in fact, the moment they see you, they just start categorizing you as "na HIV person, so no even go close to am", na HIV e dey take care of". (Participant 6)

"Like in the facility, you know, because we don't use to

bring any revenue to the hospital so the way they used to treat us sometimes is not fair." (Participant 11)

**Conflict at Work:** All the participants agreed that conflicts between them and their workmates were inevitable, due to many factors, but mostly work related. Mentioned were, lateness, laziness, being bossy, sharing and tracking of clients; having different opinion on how a particular job should be handled, target deadline, lack of synergy among the different cadres due to leadership failure, etc.

"Well, for instance, there used to be a friction with regards to delivering on the deadlines (targets)." (Participant 12)

**Socio-economic-religious, Clients Literacy, Language:** These barriers posed as big obstacles to service delivery, attainment of HIV eradication goal, and provider's performance. Poverty, illiteracy, polygamy, and over-religious beliefs made clients to delay testing, and rejection of treatment; similarly, language barrier was worse in the rural areas, denying providers deeper interactions with the clients.

"One of the challenges which we usually encounter in the field is the issue of self-denial, self-denial in the sense that when someone newly captured has been positive. There is this religion background of always saying, "God forbid", "Over my dead body", "It can't be me." (Participant 13)

**Insecurity:** The challenges of insecurity was critical, most of the providers were afraid for their lives, and families' safety. The resultant effects were, client's irregular access to medications and viral load samples collection; development of resistance to the ART, loss to follow-up. inability to trace client's phone numbers after displacement and the challenge of confidentiality during third party deliveries. One provider narrated encounter with bandits one fateful morning during working hours in his facility.

"I was in the office, I was working at about 9am, and before I knew it everywhere scattered, gunshot everywhere and we're just running. We hid in the bush for more than two hours, before we later came back to the facility. Now, if you're working in an environment where there is security challenge, there's no way you can effectively discharge your duty.... I cannot just die, leave my two children, and my wife becoming a widow (laughing), you understand." (Participant 4)

"Like where I cover, security wise, is currently one of the deadliest and a no-go-area." (Participant 12)

On probing on how the provider negotiate through this challenge, a provider has this to say;

"Most at times we engage the services of vigilantes by sending them to some of the clients that agreed for their drugs to be delivered. We front load these clients at time, because you don't know, the situation might be calm today and worse tomorrow, the community might become inaccessible." (Participant 12)

## 3.2. Focus Group Discussion Findings

**Universal and Premarital Testing:** There were divergent

views; some of the participants argued such violate individual human rights, and the principle of voluntary testing of “opt-out”. The other school of thought favored the ideal as a mean of ending the HIV plague, enabling more people with the virus to be detected; more so, the test should be done before marriageable age to prevent marital issues. However, the ways and manners religious leaders handle the disclosure of the results were among the challenges.

*“The general testing is very important, because if we don't test, we will not be able to identify those that are reactive... to place them on treatment, and the spread of HIV will continue.”* (Fgd1 Participant 3)

*“So, reaching the wedding venue, they now asked for the test, that was when they find out the lady was positive. So, instead of them to call her aside to talk to her, they presented the matter in the middle of those elders that was how that wedding ended.”* (Fgd1 Participant 1)

**New Innovation:** While some of the participants were aware about the injectable, the stem cell transplant was strange. However, the argument was centered on their applicability in our context, some argued about the unsuitability of the injectable since majority of the clients are stabilized on oral drugs and the affordability, other claimed the advantages outnumber the disadvantages, citing insecurity gain, adherence, boredom of daily drugs intake, and reduction of some of the provider's task.

*“Coming to the hospital for HIV injection will be a problem, so, giving them that drugs to be swallowing at night, hiding themselves is more preferable and good treatment for HIV. ...., the drug-seeking will not be adherence, and in HIV treatment, adherence is the most important thing.”* (Fgd1 Participant 4)

*“So, I think with this injection, it will go a long way, and it will help even us in terms of insecurity, some of them will run away, they will never collect drugs at the end of the day.”* (Fgd2 Participant 7)

On the stem cell transplant, all the participants agreed that the cost may not be affordable in our context.

*“I know a lot of clients will want to go for that transplant, because a lot of them are tired of the drugs, they want to be free of stigma, they are ready to do anything to be free of this sickness, but would not be able to afford it, except government will subsidize.”* (Fgd1 Participant 3)

**HIV and Covid-19:** Lessons learnt during the Covid-19 lockdown included, lack of comprehensive clients addresses and contact phone numbers which hindered ART home delivery; introduction of community ART intervention. They all hope these lessons will be a template for adequate response and preparation for internally displaced peoples (IDP) clients, future pandemics and other unforeseen occurrences.

*“During that era, we find out there were so many patients that we didn't know their recent addresses, and their recent phone numbers, which will have helped us to locate these patients.”* (Fgd1 Participant 1)

*“One of the major things that we learnt was the community*

*ART, before then, we were not offering our services in the community so effectively.”* (Fgd1 Participant 3)

**Brain Drain and Industrial Action:** The impact were described as critical, and all participants agreed urgent solutions are needed. Some suggested that all health workers in facilities should be involved in HIV care, non-health background individuals should be recruited and trained into HIV workforce, also, during industrial actions, waiver should be given to providers to attend to HIV clients in view of their peculiarities.

*“It's already affecting us in HIV service, because a lot of providers are stressed, and you don't expect a provider who is already stress to give optimum service or perform optimally, because he's already drained, it is as if, we are adding burdens to their already existing burdens.”* (Fgd1 Participant 3)

*“I think last year, it was almost a month or so that all the hospitals were locked up in Niger, not just here. Then those that their drugs had finished, we can't have access to refill for them.”* (Fgd2 Participant 4)

**HIV Eradication:** Participants were optimistic HIV eradication is possible in our context, if all the machinery can be put in place. These are, willingness of policy makers, right channel of resources donated by local and international donors, building on the achievement of the country 95-95-95 target; more staffing, stakeholders' engagement, preventive measures enablement and media involvements.

*“It is feasible, but so long we're still getting new infections on a daily basis, eradicating it at that point is not going to be easy for us. ... I was traveling one day in a vehicle, and there's this old somebody that says HIV/AIDS is real, then the other person said, hmmm, HIV doesn't exist again, when HIV was in existence, you hear all these jingles in the TV and radio, they talked about HIV/AIDS, how people should prevent themselves from being infected, and all this. But now, since they no longer talk about it, it shows that there's no longer HIV”. That is the mentality of the common man in the society, they believe it is only when the sensitization and awareness is going on, that is when the pandemic is visible.”* (Fgd2 Participant 6)

Some of the participants on the contrary believe the journey to eradication may still be far considering the irregularities in the current manner the implementation is being done, suggesting that the stem cell transplant may be a faster route to HIV eradication.

*“The current rate at which the implementation is currently going on, I don't see HIV been over yet. Unless the government and stakeholders involved are able to come up with a master plan.”* (Fgd2 Participant 1)

## 4. Discussion and Recommendations

The providers being the focus of the study had been allowed to voice out there opinions, needs, desires, and what they perceived as the way forward to reduce the challenges, these will form the basis of the discussion and recommenda-



tions. Firstly, for effective job performance, all *enabling factors* should be improved; obligatory formal training and regular physical update; adequate and improved providers welfare, and other incentives to mitigate the on-going phenomenon called “*Japa syndrome*”; whereby young skilled Nigerians are migrating in significant numbers to seek better opportunities in foreign lands, due to the harsh economy, frustrations, and insecurity of lives and properties [14-16]. Similarly, mental health education in view of the strong emotion attached to the job, timely promotion on merit, devoid of the “*Nigerian factor*” [17, 18].

Secondly, is *Health system and policy factors*, and a study in primary healthcare centers in Lagos state also documented challenges associated with health system [19]. There should be recognition, commendation, job security, respect, career support; synergy, and regular communication between IPs and providers, with triangulation of data to reduce duplications and transparency. Similarly, there should be provision of updated guidelines, realistic targets for smooth program delivery and auto-pilot of interventions. Recruitment of more “*merited staff*”, as against the “*whom you know syndrome*”, decentralization of HIV services in all departments, especially in the rural settings with indigenous workers, reawakening of radio and television jingles, social media sensitization, and availability of educative materials in the common local languages. Provision of funds and upgrading of existing infrastructure, increased access to HIV services with friendly, standard *one stop shop* against the traditional facilities to allow for clients privacy and confidentiality; this will allow for more integrated services by adding immunization clinic, antenatal clinic, family planning clinic, well baby clinic; also routine male and female medical check-up clinics, mental health clinic, adult nutrition clinics, etc., to the existing sexually transmitted infections (STIs) and gender violence (GV) clinics. Modern counselling rooms, with renewable energy for constant electricity; internet connection and electronic medical records (EMR) should be provided to make the work of the providers easy for tracking, etc. The one stop shops should be extended to the rural areas with franchise.

Establishment of client’s database, health cards for all HIV sufferers as a form of social health insurance [1]; the removal of all unproductive and secretive bureaucratic dealings in HIV; more key population outreaches, safer blood transfusions, enactment of laws against sociocultural practices aiding the transmission of HIV, with strict enforcement. The adoption of compulsory premarital testing, and training of religious leaders on its modus operandi is urgently needed [15, 20]. Enforcement of third-party notification by the providers when necessary, and a new approach in PMTCT management to reduce the high incidence of babies born with HIV to remove Nigeria from the top position like baby showers ceremony which encouraged husbands to be tested in Benue state [11, 21]. Introduction of newer management modalities like injectable, vaginal rings, encouragement and subsidized stem cell transplants for those who could afford [22, 23].

Thirdly, *clients support* was identified by the participants as a very crucial entity toward the anticipated eradication goal. The burden of client’s support should be removed from the service providers, and the assigned authority should own up. Clients should benefit from materials and financial assistance, scholarships, reactivation of the support group meetings, home visit enablers, job empowerment, mental health care access, and regular dissemination of educative information to the clients [1, 24].

Fourthly, *insecurity* in the state was identified as the worst non-enabling factor; currently, at a very critical level, and very crucial to the work of the providers, the scary experience given by the providers during the interviews should serve as a wake-up call to the government and security organizations to find a lasting solution to this menace plaguing the country, at a magnitude more than the HIV diseases, and having the capacity to claim more lives than HIV pandemic [14, 25].

## 5. Conclusions

The study has given an insight into HIV service in Niger state through the activities of the service providers, who are the first point of contact with the HIV clients; it had also enabled the providers to voice out the difficult situations, and responses in their day-to-day activities with the clients. The providers also proffered suggestions on the way forward toward the achievement of the WHO 2030 HIV eradication goals in Niger state, and the nation as a whole. In conclusion, it is high time the government, and the good people of Nigeria, take *ownership of HIV services*, and *let go* of dependence on international aids [26]. The service providers should be empowered by Acts to form their *pressure group* to promote and advocate all the highlighted difficulties, they should be celebrated every world AIDS day events in view of their sacrifices and dedication, during the pandemic that has stayed longer with mankind, and according to the word of a participant in pidgin, “*without us they are not there, and without them, there are no us*”.

## 6. Limitations

The insecurity situation in the state prolonged the data collection duration, limited access to some locations, thus the online interviews methods. Also, inability to get permission to conduct IDI and FGD for beneficiaries, due official “HIV sensitivity” bureaucracy; internet connectivity problem hindered some providers selected for FGDs to connect during the interviews. For *further research*, similar qualitative studies for the clients, policy makers and implementing partners officials are suggested to compare their perspectives, and research to evaluate the HIV services in Niger state in all its ramifications.



## Abbreviations

AIDS: Acquired Immunodeficiency Syndrome  
 ART: Anti-Retroviral Therapy  
 HIV: Human Immunodeficiency Syndrome  
 NACA: National Agency for the Control of HIV/AIDS  
 PMTCT: Prevention of Mother to Child Transmission  
 UNAIDS: Joint United Nations Programme on HIV/AIDS

## Acknowledgments

Our appreciation goes to ethical approval committees' members; the HIV services providers, who had been stressed on the job, and still sacrificed to participate in the interviews, so their voices, can be heard, we say, thank you.

## Ethical Approval

Approvals were obtained from the ethical committees of the State Agency for the Control of HIV/AIDS, Niger state Ministry of Health, and Centre for Clinical Care and Clinical Research.

## Conflicts of Interest

The authors declare no conflicts of interest.

## References

- [1] Avert. (2021 April 24). *HIV around the world*. Retrieved February 6, 2022, from <https://www.avert.org/professionals/hiv-around-world>
- [2] NAIIS (2018), *The 2018 Nigeria HIV/AIDS indicator and impact survey (NAIIS)*. Nigeria HIV/AIDS Indicator and Impact Survey. (n.d.). Retrieved April 11, 2022, from <https://naiis.ng/>
- [3] NACA Federal Republic of Nigeria 2017-2021. (n.d.). Retrieved February 6, 2022, from <https://naca.gov.ng/wp-content/uploads/2018/05/National-HIV-and-AIDS-Strategic-Plan-FINAL1.pdf>
- [4] UNAIDS. (n.d.). *Global HIV statistics* - Retrieved February 6, 2022, from [https://embargo.unaids.org/static/files/uploaded\\_files/UNAIDS\\_2021\\_FactSheet\\_en\\_em.pdf](https://embargo.unaids.org/static/files/uploaded_files/UNAIDS_2021_FactSheet_en_em.pdf)
- [5] UNAIDS Ghana. (2022, February 4). Retrieved February 6, 2022, from <https://www.unaids.org/en/regionscountries/countries/ghana>
- [6] UNAIDS. (2021, December 26). *South Africa*. Retrieved February 6, 2022, from <https://www.unaids.org/en/regionscountries/countries/southafrica>
- [7] UNAIDS (Mar 26<sup>th</sup> 2021) *World AIDS Day 2021: "End inequalities. End AIDS, End pandemics"* General Assembly of the United Nations United Nations Retrieved January 15, 2022, from <https://www.un.org/pga/76/2021/11/30/world-aids-day-2021-end-inequalities-end-aids-end-pandemics/>
- [8] De Lay, P. R., Benzaken, A., Karim, Q. A., Aliyu, S., Amole, C., Ayala, G., Chalkidou, K., Chang, J., Clayton, M., Couto, A., Dieffenbach, C., Dybul, M., El Sadr, W., Gorgens, M., Low-Beer, D., Mesbah, S., Saveedra, J., Sirinirund, P., Stover, J., ... Hader, S. (2021). Ending AIDS as a public health threat by 2030: Time to reset targets for 2025. *PLoS Medicine*, 18(6), 6–10. <https://doi.org/10.1371/journal.pmed.1003649>
- [9] Mabuto, T., Hansoti, B., Kerrigan, D., Mshweshwe-Pakela, N., Kubeka, G., Charalambous, S., & Hoffmann, C. (2019). HIV testing services in healthcare facilities in South Africa: A missed opportunity. *Journal of the International AIDS Society*, 22(10). <https://doi.org/10.1002/jia2.25367>
- [10] Unaiids.org. (2022, February 7). *Identification of fast-spreading HIV variant provides evidence of urgency to halt the pandemic and reach all with testing and treatment*. UNAIDS. Retrieved February 20, 2022, from [https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2022/february/20220207\\_hiv-variant](https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2022/february/20220207_hiv-variant)
- [11] Cohen, J. (2018, June 12). *Nigeria has more HIV-infected babies than anywhere in the world. it's a distinction no country wants*. Home -. Retrieved April 3, 2022, from <https://joncohen.org/2018/06/12/nigeria-has-more-hiv-infected-babies-than-anywhere-in-the-world-its-a-distinction-no-country-wants/>
- [12] Onovo, A. A., Adeyemi, A., Onime, D., Kalnoky, M., Kagniniwa, B., Dessie, M., Lee, L., Parrish, D., Adebobola, B., Ashefor, G., Ogorry, O., Goldstein, R., & Meri, H. (2023). Estimation of HIV prevalence and burden in Nigeria: A bayesian predictive modelling study. *eClinicalMedicine*, 62, 102098. <https://doi.org/10.1016/j.eclinm.2023.102098>
- [13] Unaiids.org. (2021, October 31). *Five questions about the HIV response in Nigeria*. UNAIDS. Retrieved February 24, 2022, from <https://www.unaids.org/en/resources/presscentre/featurestories/2021/october/five-questions-nigeria>
- [14] ReliefWeb. (2022, December 31). *Nigeria: Violence against health care in conflict 2022 - nigeria*. <https://reliefweb.int/report/nigeria/nigeria-violence-against-health-care-conflict-2022>
- [15] Marwa, R., & Anacli, A. (2020). Perceived barriers toward provider-initiated HIV testing and Counseling (PITC) in Pediatric Clinics: A qualitative study involving two regional hospitals in Dar-es-Salaam, Tanzania. *HIV/AIDS - Research and Palliative Care, Volume 12*, 141–150. <https://doi.org/10.2147/hiv.s235818>
- [16] 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). <https://doi.org/10.1186/s12914-017-0118-2>

- [17] Kram, N. A.-Z., Yesufu, V., Lott, B., Palmer, K. N., Balogun, M., & Ehiri, J. (2021). 'Making the most of our situation': A qualitative study reporting health providers' perspectives on the challenges of implementing the prevention of mother-to-child transmission of HIV services in Lagos, Nigeria. *BMJ Open*, 11(10). <https://doi.org/10.1136/bmjopen-2020-046263>
- [18] Mutabazi, J. C., Gray, C., Muhwava, L., Trotter, H., Ware, L. J., Norris, S., Murphy, K., Levitt, N., & Zarowsky, C. (2020). Integrating the prevention of mother-to-child transmission of HIV into primary healthcare services after AIDS denialism in South Africa: Perspectives of experts and Health Care Workers - A qualitative study. *BMC Health Services Research*, 20(1). <https://doi.org/10.1186/s12913-020-05381-5>
- [19] Okusanya, B., Nweke, C., Gerald, L. B., Pettygrove, S., Taren, D., & Ehiri, J. (2022). Are prevention of mother-to-child HIV transmission service providers acquainted with national guideline recommendations? A cross-sectional study of Primary Health Care Centers in Lagos, Nigeria. *BMC Health Services Research*, 22(1). <https://doi.org/10.1186/s12913-022-08152-6>
- [20] Noronha, F. S., George, M. V., & Sreedevi. (n.d.). *Mandatory HIV testing: An Indian perspective*. HIV Nursing. Retrieved March 6, 2022, from <https://hivnursing.net/index.php/hiv/article/view/183>
- [21] Larki, M., Bahri, N., & Latifnejad Roudsari, R. (2021). Life loaded with threat and vulnerability: A qualitative inquiry into the experiences of HIV negative married women in serodiscordant heterosexual relationships. *BMC Women's Health*, 21(1). <https://doi.org/10.1186/s12905-021-01546-4>
- [22] Phillips, H. (2023, May 18). *Uganda moves forward on prep vaginal ring and injection*. Be in the KNOW. <https://www.beintheknow.org/news-and-blogs/uganda-moves-forward-prep-vaginal-ring-and-injection>
- [23] Lanese, N. (2022, July 27). *66-year-old likely cured of HIV after stem cell transplant*. LiveScience. Retrieved August 7, 2022, from <https://www.livescience.com/fifth-patient-cured-of-hiv>
- [24] Giguère, K., Eaton, J. W., Marsh, K., Johnson, L. F., Johnson, C. C., Ehui, E., Jahn, A., Wanyeki, I., Mbofana, F., Bakiono, F., Mahy, M., & Maheu-Giroux, M. (2021). Trends in knowledge of HIV status and efficiency of HIV testing services in sub-Saharan Africa, 2000–20: A modelling study using survey and HIV testing programme data. *The Lancet HIV*, 8(5). [https://doi.org/10.1016/s2352-3018\(20\)30315-5](https://doi.org/10.1016/s2352-3018(20)30315-5)
- [25] icirnigeria.org Bandits invade Niger Hospital, kill two, abduct doctor, nurses, (n.d.-a). <https://www.icirnigeria.org/bandits-invade-niger-hospital-kill-two-abduct-doctor-nurses-patients/>
- [26] Unaids.org. (2024, January 19). *UNAIDS launches New Approach to ensure the long-term sustainability of the HIV response*. UNAIDS. [https://www.unaids.org/en/resources/presscentre/featurestories/2024/january/20240119\\_HIV\\_response\\_sustainability\\_prime](https://www.unaids.org/en/resources/presscentre/featurestories/2024/january/20240119_HIV_response_sustainability_prime)