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Impact of AIDS Prevention Initiative in Nigeria (APIN) on Beneficiaries in Makurdi Metropolis, Benue State, Nigeria.

Makir Nguemo Winifred[1]*, Kwanga Mbatsavbee Godwin[1], Dam Peverga Daniel[1], Dzer Aondona[1], Gyanggyang Msughter Ierve[1], Atsaakaa Hangem Joseph[2]

[1]Department of Geography, Benue State University, Makurdi
[2]National AIDS/STIs Control Programme, Geidam, Yobe State.

A B S T R A C T

This research evaluated the impact of AIDS Prevention Initiative in Nigeria (APIN) on beneficiaries in Makurdi Metropolis, Benue State, Nigeria. Specifically, the study evaluated the awareness of beneficiaries in Makurdi metropolis about APIN services, examined their impact on HIV/AIDS prevalence and health outcomes and identified the challenges they face in accessing and utilising these services. The study was anchored on the Health Belief Model (HBM) and Diffusion of Innovations Theory. The study adopted a descriptive survey research method using a questionnaire as a data-gathering instrument. A sample size of 393 was selected across the selected healthcare centres in Makurdi using the stratified, systematic and simple random sampling techniques in selecting respondents across the study area. A total of 393 copies of questionnaires were distributed to 393 beneficiaries and 390 copies were successfully retrieved and analysed using the simple frequency and percentage. According to the findings, Makurdi Metropolis beneficiaries are familiar with APIN services, primarily through social media, and are positive about their effectiveness in reducing HIV prevalence and improving reproductive health access. Despite challenges like transportation issues and unfriendly staff, most users find treatment satisfactory. The study concludes that while APIN services are effective and accessible, overcoming logistical and systemic challenges is crucial for improving user satisfaction and health outcomes, and suggests strengthening resource allocation, service delivery, and digital platforms. The study inter-alia recommended that the Ministry of Health, APIN and other organizations should expand social media campaigns, conduct regular feedback sessions, and invest in staff training to improve service satisfaction and health outcomes. They should also partner with local transport services, reduce wait times, advocate for increased funding for testing kits and medications, and invest in supportive staff training.

Keywords: APIN, HIV/AIDS, healthcare accessibility, social media, service satisfaction, Makurdi, Nigeria

1. Introduction

The Acquired Immune Deficiency Syndrome (AIDS) remains a significant global health threat, ranking among the deadliest and most enduring pandemics in human history. Since its emergence, AIDS has claimed millions of lives worldwide, and despite advancements in treatment, it continues to pose a substantial challenge, particularly in low- and middle-income countries. The pandemic is driven by the Human Immunodeficiency Virus (HIV), which weakens the immune system, leaving individuals vulnerable to opportunistic infections and certain cancers (World Health Organization, 2023). While the recent COVID-19 pandemic momentarily shifted global attention away from HIV/AIDS, the urgency to address the ongoing AIDS crisis remains paramount. The need for sustained focus on HIV prevention and treatment is essential as the world adapts to the "new normal" introduced by COVID-19. Concerted efforts to curb the spread of HIV must continue alongside ongoing public health initiatives to combat the spread of other diseases (Katz, Ryu, Onuegbu, Psaros, Weiser, Bangsberg, & Tsai, 2018).

HIV/AIDS prevention programmes play a pivotal role in mitigating the risk of transmission and addressing the impact of the disease. Research has shown that well-resourced and culturally competent HIV prevention initiatives can effectively reduce risk behaviours and transmission rates, especially when they are evaluated and monitored with sufficient intensity and rigour (Pantalone, Nelson, Batchelder, Chiu, Gunn, & Horvath, 2020; Owan, Akah, Ogbeche, & Obla, 2021). The AIDS pandemic, particularly in sub-Saharan Africa, is predominantly driven by heterosexual transmission, and the continent continues to bear a disproportionately high burden of the disease (Palazuelos, Farmer, & Mukherjee, 2018). Despite progress in some parts of the world, Africa—particularly Nigeria—remains at the forefront of the HIV/AIDS crisis.

Nigeria, Africa's most populous country, has witnessed a significant HIV/AIDS burden, with an estimated 2.6 million people living with the virus as of 2023 (Federal Ministry of Health, 2023). Benue State, in particular, has one of the highest HIV prevalence rates in the country, with approximately 16.8% of its population affected, translating to over 300,000 individuals living with the disease. This places Benue among the regions most affected by the HIV/AIDS pandemic in Nigeria (Federal Ministry of Health, 2023). The socio-economic implications of the epidemic are profound, as the disease affects a large segment of the active labour force, with severe consequences for agricultural productivity and economic development (Drucker, 2018).

1.1 Overview of AIDS Prevention Initiative in Nigeria (APIN) Interventions

In response to the HIV/AIDS crisis, several international and local initiatives have been implemented to provide prevention, care, and treatment services. One such intervention is the AIDS Prevention Initiative in Nigeria (APIN), launched in 2004 through a collaboration between the Harvard School of Public Health and the Nigerian government, with funding support from the Bill & Melinda Gates Foundation and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) (APIN, 2023). Initially focused on HIV/AIDS prevention, care, and treatment, APIN has evolved into an independent non-governmental organization, aiming to build local capacity for sustainable HIV/AIDS programming in Nigeria. The initiative has been instrumental in expanding access to HIV/AIDS care services, enhancing prevention efforts, and strengthening the healthcare system's response to the pandemic (UNICEF, 2020; APIN, 2023).

APIN's efforts have yielded significant results, particularly in preventing mother-to-child transmission (PMTCT), where transmission rates have been reduced from 34% to 9% (Ziraba, Madise, Kimani, & Otiende, 2017). Additionally, APIN has established over 900 care sites across Nigeria, providing critical services such as HIV testing, treatment, and care. By collaborating with the Nigerian government and other stakeholders, APIN has mobilized financial, technical, and human resources to improve service delivery, reduce stigma, and advocate for better care for people living with HIV/AIDS (Adedokun, Oluwole, & Rozario, 2017; Jambari, Olagunju, & Adenuga, 2020).

However, despite these achievements, challenges persist in the effective monitoring and evaluation of HIV/AIDS programmes, particularly in resource-limited settings such as Benue State. The healthcare infrastructure in Makurdi Metropolis, like many parts of Nigeria, is characterized by limited resources, inadequate facilities, and uneven access to care (Oche, Kaoje, Gana, & Ango, 2019). Health facilities often lack essential equipment and supplies, and the distribution of healthcare services is uneven, with some areas having limited access, leading to delays in seeking medical attention (Iorfa, Agbir, & Agbir, 2018). Additionally, issues such as inadequate funding, poor monitoring and evaluation frameworks, and the limited capacity of healthcare workers further complicate the effective delivery of HIV/AIDS services (Cavazos-Rehg, 2021).

Despite the critical role that APIN has played in combating HIV/AIDS, particularly in Makurdi Metropolis, it remains unclear how beneficiaries perceive and respond to the services provided by the initiative. Furthermore, the extent to which the challenges faced by healthcare systems in developing countries, including Nigeria, have hindered the efficacy of these interventions is yet to be fully understood. This study aims to assess the impact of the AIDS Prevention Initiative in Nigeria (APIN) on beneficiaries in Makurdi Metropolis, Benue State. It seeks to evaluate the effectiveness of the programme, the challenges faced in service delivery, and the overall contribution of APIN to improving the health outcomes of individuals living with HIV/AIDS in the region.

This assessment is crucial for understanding the dynamics of HIV/AIDS service delivery in resource-limited settings and for identifying strategies to strengthen the impact of such initiatives on vulnerable populations. By examining the specific context of Makurdi, this study contributes to broader discussions on how international health programmes can be optimized to achieve sustainable and effective outcomes in the fight against HIV/AIDS.

2. Materials and methods

2.1 Study Area

The study was conducted in Makurdi Local Government Area (LGA) of Benue State, Nigeria, which serves as the administrative headquarters of the state. Geographically, Makurdi LGA is located between latitudes 7°43'48" N and 7°45'47" N, and longitudes 8°31'48" E and 8°33'40" E of the Greenwich Meridian. It shares boundaries with Guma LGA to the north, Gwer-West LGA to the west, and Gwer-East LGA to the east (See Figure 1).

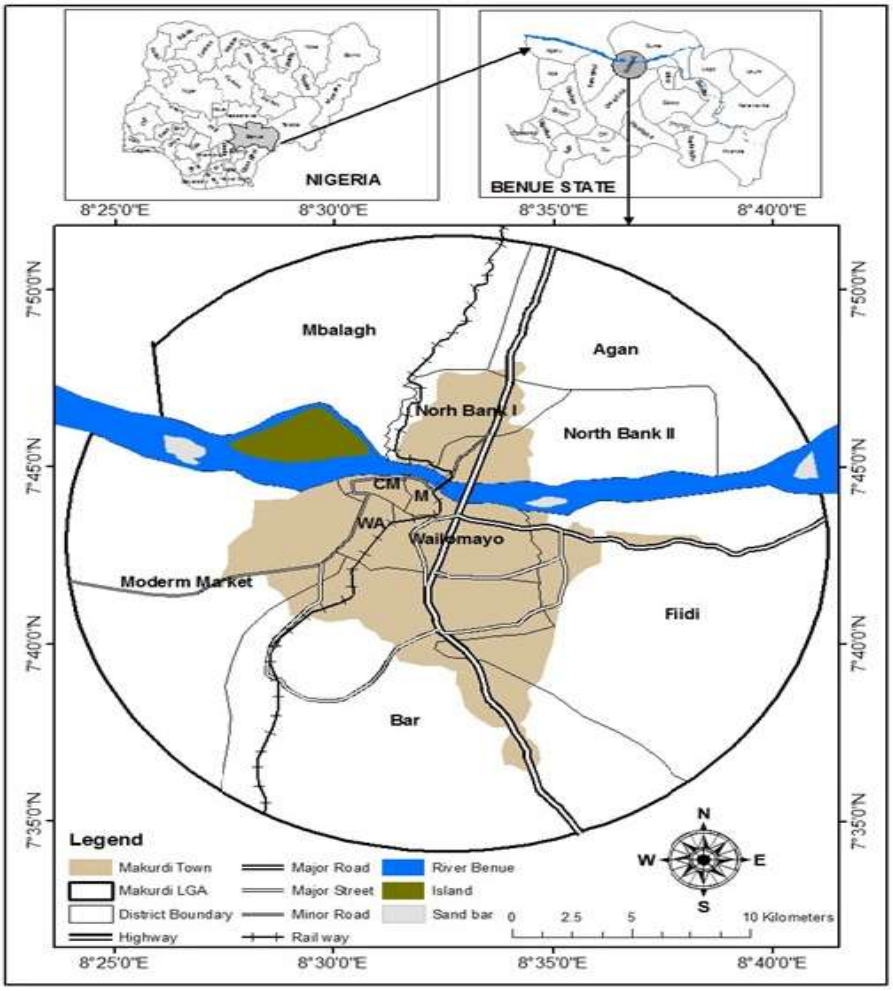

Figure. 1: Map of Benue State showing the Study Area

Source: Bureau of Land, Survey and Solid Minerals, Makurdi, 2023

Makurdi is subdivided into eleven council wards, including Agan, Ankpa/Wadata, Bar, Central South Mission, Fiidi, Mbalagh, Market Clark, Modern Market, North Bank I, North Bank II, and Wailomayo. The predominant ethnic groups in Makurdi include the Tiv, Idoma, and Igede, with minority groups such as Ufia, Etulo, Agatu, Hausa, Igbo, and Jukun also residing in the area.

Makurdi's geological composition primarily features sandstone formations, particularly micaceous and feldspathic sandstones, commonly found in low-lying areas. The soils of the region are classified as tropical ferruginous soils, lithosols from floodplains, and hydrographic soils from wetlands and floodplains. The ease of water infiltration into the sandy topsoil makes shallow wells a common source of water for the local population. The Benue River is the primary drainage system, with additional streams such as Kpege, Idye, Urudu, and Demekpe serving as perennial watercourses that further drain the region.

The climate of Makurdi is classified as tropical wet and dry (Köppen Aw), characterized by distinct wet and dry seasons with alternating hot and cool temperatures. The town receives an average annual rainfall of approximately 1173 mm, which supports a predominantly agricultural economy. According to Hemba, Iortyom, Ropo, & Dam, (2017), the primary economic activities in Makurdi include agriculture and commerce, with subsistence farming and growing commercial farms playing central roles in the livelihoods of the local population. The commercial sector has expanded in recent years, with major markets such as Wurukum and Modern Market providing employment opportunities. The informal sector also significantly contributes to the local economy through small-scale businesses, which provide essential goods and services to the population (Ademiluyi & Olatunji, 2016).

3. Methodology

This study employed a survey research design to gather data from beneficiaries of healthcare services in Makurdi Metropolis, where the AIDS Prevention Initiative in Nigeria (APIN) operates and implements its programmes. The study population consisted of 20,981 beneficiaries receiving care at five healthcare centres within the metropolis. Data collected included demographic information of the beneficiaries, healthcare service data, and programme implementation details.

Table 1: Population of Selected Healthcare Centres

S/N	Responses	Council Ward	Population
1	Bishop Murray Medical Centre	Wailomayo	4,777
2	Federal Medical Centre, Makurdi	Central/South Mission	9,417
3	General Hospital, North Bank	North Bank	4,093
4	Benue State University Teaching Hospital	Fiidi	1,479
5	Madonna Hospital	Wailomayo	1,215
	Total		**20,981**

Source: Researchers' Field Survey, 2024

3.1 Data Collection

The primary data collection tool was a structured questionnaire, while secondary data were sourced from textbooks, academic journals, magazines, and online resources. The sample size was determined using Taro Yamane's (1967) formula, which is commonly used for determining sample sizes in social science research. The study used three sampling techniques: stratified sampling to select the healthcare centres, proportional sampling to allocate beneficiaries to each centre, and simple random sampling to select individual beneficiaries from the population.

The stratified sampling technique involved dividing the selected healthcare facilities into five strata based on their geographic distribution and provision of APIN services. The facilities selected were Madonna Hospital, Benue State University Teaching Hospital, General Hospital North Bank, Federal Medical Centre, and Bishop Murray Medical Centre. Based on their population sizes, 78 beneficiaries were randomly selected from each of the five healthcare facilities, resulting in a sample size of 390 beneficiaries. To account for the larger number of registered patients at the Federal Medical Centre, three additional beneficiaries were randomly selected, bringing the total sample size to 393.

Table 2: Sample Population of Beneficiaries

S/N	Responses	Council Ward	Population
1	Bishop Murray Medical Centre	Wailomayo	80
2	Federal Medical Centre, Makurdi	Central/South Mission	78
3	General Hospital, North Bank	North Bank	78
4	Benue State University Teaching Hospital	Fiidi	78
5	Madonna Hospital	Wailomayo	78
	Total		**393**

Source: Researchers' Field Survey, 2024

The questionnaire used for data collection was divided into two sections. Section A captured the demographic characteristics of the beneficiaries, while Section B addressed the research questions formulated for the study. To ensure smooth data collection, two trained assistants were recruited from each healthcare Centre to administer the questionnaires to beneficiaries.

3.2 Techniques for Data and Statistical Analysis

The statistical analysis employed in this study was designed to provide a comprehensive evaluation of the impact of the AIDS Prevention Initiative in Nigeria (APIN) on beneficiaries in Makurdi Metropolis. Descriptive statistical techniques were used to analyze and present the data collected from the beneficiaries of APIN services across the selected healthcare Centres. These methods included frequency distributions, percentages, and mean values to summarize the demographic characteristics of the respondents and their responses to key research questions. This approach allowed for the clear and concise presentation of the research data, with each row representing a variable and each column showing specific values or categories. The analysis provided a detailed breakdown of the beneficiaries' responses and enabled a comprehensive evaluation of the impact of APIN on the healthcare services in Makurdi Metropolis.

4. Discussion of Results

4.1 Beneficiaries' Awareness of APIN Services

The results of this study provide a comprehensive analysis of beneficiaries' awareness, utilization, impact, and challenges associated with APIN services in the Makurdi Metropolis. The findings from this study reveal critical insights into the effectiveness, accessibility, and community perception of healthcare services offered by APIN in Makurdi.

Table 3: Level of awareness among beneficiaries in Makurdi metropolis about APIN services

Level of Awareness	Frequency	Percentage (%)
Familiarity with APIN Services		
Very familiar	378	**97**
Not very familiar	12	**3**
Not at all familiar	0	**0**
Total	**390**	**100**
Platform you heard about APIN Services		
Health care provider	16	4
Community outreach programmes	41	11
Friends or family	32	8
Television/Radio	23	6
Social media	260	67
Others	18	5
Total	**390**	**100**
APIN Services you are aware of		
HIV prevention	194	50
Nutrition	55	14|
Health	53	14
Shelter	48	12
Legal protection of the HIV/AIDS victims	30	8
Others	10	3
Total	**390**	**100**
Frequency of APIN Services use		
Weekly	0	0
Monthly	116	30
Quarterly	254	65
Annually	20	5
Total	**390**	**100**
Rate of the accessibility of APIN Services		
Very accessible	328	84
Not very accessible	62	16
Not accessible at all	0	0

Total	**390**	**100**
Awareness about HIV/AIDS before coming in contact with APIN		
Yes, I do	343	88
No, I don't	47	12
Total	**390**	**100**

From the results in Table 3, 97% of the beneficiaries reported being very familiar with APIN's services, indicating a robust outreach and presence in the community. This aligns with the conclusions drawn by Okonofua (2020), who highlighted that increased visibility of healthcare programs significantly raises public awareness and boosts their utilization. The high familiarity with APIN services can be attributed to long-term community engagement strategies, which underscores the importance of sustained efforts in fostering healthcare awareness.

Notably, 67% of respondents identified social media as their primary source of information regarding APIN's healthcare services. This finding corroborates the study by Nwafor and Aluko (2019), who recognized social media as a transformative tool for health communication across Africa. Digital platforms have significantly expanded the reach of health information, bridging gaps between healthcare providers and communities, thus amplifying the dissemination of vital healthcare information.

50% of the beneficiaries were already aware of HIV before encountering APIN's programs, reflecting a moderate level of baseline awareness. This level of understanding is consistent with other African regions where community-based interventions have elevated HIV-related knowledge (Adeoye & Omole, 2018). However, the study concurs with Oyo-Ita, Ikpeme, Etokidem, Offor, Okokon, and Etuk, (2015), who noted that while general awareness of HIV/AIDS is often high, the depth of specific knowledge about the disease remains shallow, contributing to misconceptions and poor attitudes toward HIV prevention and treatment. Bamise, Bamise, & Adedigba (2011), similarly observed that among adolescents, although awareness of HIV/AIDS is widespread, a detailed understanding of the disease lags. Therefore, this study reinforces the necessity for continuous education to deepen specific knowledge and dispel erroneous beliefs.

Additionally, 88% of respondents reported prior knowledge of HIV/AIDS before engaging with APIN, reflecting the success of years-long information campaigns. This corroborates the findings of Eze and Olorunfemi (2020), who highlighted the pivotal role of prior knowledge in shaping health-seeking behaviours, thereby creating an ongoing need for education on health issues.

4.2 Impact of APIN Services on Health Outcomes and HIV/AIDS Prevalence

From the results in Table 4, the beneficiaries largely rated APIN services as effective in reducing HIV/AIDS prevalence, with 61% of respondents affirming that APIN's services had been effective in reducing the prevalence of HIV/AIDS by improving health outcomes. This result demonstrates the impact of APIN's targeted healthcare interventions, in line with the findings of Nwaka & Adetayo (2020), who underscored the importance of focused interventions in curbing the HIV/AIDS epidemic in sub-Saharan Africa.

The significant reduction in HIV cases is consistent with studies by Adejimi, Ajibola, Akinkumi, Agbeleye, Alawale, Adeola-Musa, & Adenekan, (2018), Hanum, Cambiano, Sewell, Rodger, Nwokolo, Asboe, & Gilson (2021), and Olusola, Olaleye, & Odaibo (2021), which documented the positive influence of technological advancements on reducing HIV/AIDS prevalence. However, the findings contrast with those of Jenness, Le Guillou, Chandra, Mann, Sanchez, Westreich, & Marcus (2021), who argued that the persistent rise in sexually transmitted infections, including HIV/AIDS, suggests that past efforts, including antiretroviral therapies, have been insufficient. The disparity may be due to the differing variables investigated or contextual factors, such as geographical and socio-economic conditions, that influence HIV/AIDS prevalence across different regions. Nevertheless, this study's findings are consistent with the CIPP framework, which emphasises the consideration of contextual factors in program evaluations.

Table 4: Impact of APIN Services on HIV/AIDS prevalence and health outcomes in the Makurdi metropolis

Service Effectiveness and Health Improvements	**Frequency**	**Percentage (%)**
Effectiveness of APIN services in reducing the prevalence of HIV/AIDS		
Very Effective	100	26
Effective	239	61
Moderately Effective	13	3
Not Effective	38	10
Total	**390**	**100**
APIN have improved access to reproductive health services in the Makurdi metropolis		
Strongly agree	340	88

Agree	32	8
Disagree	12	3
Strongly disagree	6	2
Total	**390**	**100**
Satisfaction with the availability and quality of HIV/AIDS prevention programmes provided by APIN		
Very Satisfied	57	15
Satisfied	178	46
Neutral	55	14
Dissatisfied	35	9
Very Dissatisfied	65	17
Total	**390**	**100**
Level of improvement in reproductive health outcomes due to APIN services		
Significant Improvement	62	16
Slight Improvement	328	84
No Improvement	0	0
Total	**390**	**100**

Source: Researchers Field Survey, 2024

The study also shows that 88% of beneficiaries strongly agreed that APIN had increased their access to essential healthcare services, a finding that resonates with Okeke (2019), who highlighted the direct correlation between healthcare availability and improved community health outcomes. Furthermore, 46% of beneficiaries expressed satisfaction with APIN's programs, attesting to their effectiveness in meeting the community's healthcare needs. These satisfaction levels mirror the results of Okoro (2018), who found that the quality and efficacy of healthcare services in Nigeria are key determinants of patient satisfaction.

Regarding reproductive health outcomes, 84% of beneficiaries reported modest improvements, acknowledging the positive influence of APIN's interventions. This finding is in line with Olanrewaju (2021), who highlighted the potential of comprehensive reproductive health programs to improve community health metrics. APIN's prevention messages, focusing on abstinence, faithfulness, and condom use, were also viewed favourably, with the majority of respondents rating their impact on preventive measures as high or very high. This mirrors the findings of Chidi (2018), who emphasized the critical role of effective communication strategies in promoting health behaviour change and reducing HIV transmission rates.

APIN's holistic approach, offering services that extend beyond healthcare—such as education, nutrition, shelter, and legal protection for HIV/AIDS victims—differentiates it from other organizations. While Gassama & Kao (2018) contended that food insecurity can undermine adherence to antiretroviral therapy, APIN's integrated care model, which includes social support, has helped address some of these challenges. Adebayo (2022) also advocated for such integrated support systems to sustainably improve health outcomes across Africa, reinforcing the importance of APIN's approach.

Paradoxically, despite these challenges, 84% of respondents still rated APIN's facilities in Makurdi as highly accessible. This finding suggests that while physical access to services is commendable, qualitative aspects of service delivery, such as resource availability and staff attitudes, require improvement. Eze (2021) similarly noted that although healthcare facilities may be geographically accessible, other factors often undermine their effectiveness in the eyes of the community. The study also confirms that 65% of respondents approved of the quality of services rendered, underscoring the general acceptance of APIN's services despite the challenges encountered. This finding supports the broader body of literature suggesting that progress has been made in HIV prevention and treatment, though challenges remain (Okoro, 2018).

4.3 Influence of APIN's HIV/AIDS Prevention Messages

Table 5 presents findings on the level of impact of various HIV/AIDS prevention messages disseminated by APIN. Abstinence messages had a high or very high impact on 50% of the respondents, while messages encouraging faithfulness and the accurate and consistent use of condoms were rated as having a high or very high impact by 58% and 51% of the beneficiaries, respectively. Additionally, mother-to-child prevention messages had a high or very high impact on 60% of the respondents, underscoring the significance of targeted messaging in preventing vertical transmission of HIV.

Other messages, such as those related to health (73%), education and sensitization (61%), and legal protection for HIV/AIDS victims (61%), were also rated as impactful by beneficiaries. These findings suggest that APIN's comprehensive messaging strategy is effective in influencing positive health behaviours and fostering awareness of HIV prevention among the population.

Table 5: Level of positive impact of APIN's HIV/AIDS prevention messages on the beneficiaries

Variables	Very High	High	Low	No Impact	Undecided
Abstinence	78	117	58	39	20
	20%	30%	15%	10%	20%
Been faithful	78	150	50	30	4
	20%	38%	13%	8%	1%
Accurate and consistent use of condom	91	110	67	39	5
	23%	28%	17%	10%	1%
Mother-To-Child prevention	78	157	58	19	0
	20%	40%	15%	5%	0%
Health	71	214	8	9	10
	18%	55%	2%	2%	3%
Education/sensitization	80	155	38	29	10
	21%	40%	10%	7%	3%
Nutrition for services for HIV/AIDS victims	78	150	50	30	4
	20%	38%	13%	8%	1%
Shelter	91	110	67	39	5
	23%	28%	17%	10%	1%
Legal protection for HIV/AIDS victims	88	147	48	19	10
	23%	38%	12%	5%	3%

Source: Researchers Field Survey, 2024

4.4 Obstacles in Accessing APIN Services

Table 6 outlines the various obstacles encountered by beneficiaries when attempting to access APIN services. The most commonly reported obstacle was a combination of transportation issues, long waiting times, lack of information about services, unfriendly staff, and inadequate resources, with 42% of the beneficiaries citing all of these factors. Individually, 10% of respondents highlighted transportation issues, 12% noted long waiting times, and 14% identified a lack of information about services. Additionally, 15% of beneficiaries reported unhelpful or unfriendly staff, while smaller proportions raised concerns about inadequate testing kits (5%) and drug shortages (5%).

Table 6: Obstacles beneficiaries encounter when trying to access APIN services

Obstacles in accessing APIN Services	Frequency	Percentage (%)
Transportation issues	31	10
Long waiting times	45	12
Lack of information about services	55	14
Unfriendly or unhelpful staff	57	15
Inadequate testing kits	20	5
Inadequate drugs	18	5
All of the above	164	42
Total	**390**	**100**

Despite the successes, 42% of respondents reported encountering barriers to accessing healthcare services, particularly in transportation, long waiting times, and inadequate information dissemination. These findings are consistent with Adesina, Salami, & Oluwaseun (2019), who identified similar logistical and communication challenges as significant barriers to healthcare access across Nigeria. The study also noted issues related to unhelpful staff, resource shortages, and the high cost of services, echoing the findings of the State Ministry of Health (SMOH) (2016) report, which emphasised the persistent challenges facing Nigeria's healthcare system, particularly in rural areas.

Abdulraheem, Oladipo, & Amodu (2022), further highlighted the deterioration of healthcare infrastructure and services in Nigeria, exacerbated by the ongoing brain drain and the concentration of resources in urban areas. This urban-rural divide in healthcare access has been well-documented, with studies by Kim, Tanser, Tomita, Vandormael, & Cuadros, (2021); Amiri, McDonell, Denney, Buchwald, & Amram, (2021), and Pereira, Braga, Servo, Serra, Amaral, Gouveia, & Paez, (2021), all pointing to significant disparities in healthcare provision across Nigeria's geopolitical zones.

The findings indicate that while APIN services are generally well-received, logistical and operational challenges persist, potentially limiting the overall effectiveness and accessibility of the services.

4.5 Physical Accessibility of APIN Facilities

As seen in Table 7, most beneficiaries (84%) reported that APIN facilities were very accessible, with 16% stating they were not very accessible. No beneficiaries reported a complete lack of accessibility. These results reflect a positive overall perception of the physical accessibility of APIN facilities, which may contribute to the high level of engagement with the services.

Table 7: Rate of the physical accessibility of APIN facilities

Rate of the physical accessibility of APIN facilities	Frequency	Percentage (%)
Very accessible	328	84
Not very accessible	62	16
Not accessible at all	0	0
Total	**390**	**100**

Access to healthcare is a notorious barrier across many African contexts, and this finding emphasizes the effectiveness of APIN's initiatives in reducing such obstacles. Moyo & Dube (2022), similarly found that lowering geographical and financial barriers increased the uptake of healthcare services, supporting the notion that APIN's focus on accessibility has been well-received.

4.6 Satisfaction with the Quality of Services

Table 8 provides insights into beneficiaries' satisfaction with the quality of services received from APIN. The majority of respondents (65%) were satisfied with the effectiveness of the treatment or assistance provided. Additionally, 30% were satisfied with the professionalism of staff, while 5% appreciated the support and follow-up from staff. No respondents indicated overall satisfaction with services, pointing to areas where APIN could focus on enhancing service delivery and follow-up care.

Table 8: Satisfaction with the quality of services received from APIN

Satisfaction with the quality of services received from APIN	Frequency	Percentage %
Overall satisfaction with services	0	0
Professionalism of staff	116	30
Effectiveness of the treatment or assistance provided	254	65
Support and follow-up from the staff	20	5
Total	**390**	**100%**

Paradoxically, despite these challenges, 84% of respondents still rated APIN's facilities in Makurdi as highly accessible. This finding suggests that while physical access to services is commendable, qualitative aspects of service delivery, such as resource availability and staff attitudes, require improvement. Eze (2021) similarly noted that although healthcare facilities may be geographically accessible, other factors often undermine their effectiveness in the eyes of the community. The study also confirms that 65% of respondents approved of the quality of services rendered, underscoring the general acceptance of APIN's services despite the challenges encountered. This finding supports the broader body of literature suggesting that progress has been made in HIV prevention and treatment, though challenges remain (Okoro, 2018).

5. Conclusion

The study on APIN services in Makurdi Metropolis provides a multifaceted yet promising view of healthcare accessibility and efficacy, particularly in the domain of HIV/AIDS prevention and treatment. The findings demonstrate a high level of familiarity with APIN's services, predominantly facilitated through social media platforms, which have proven to be a pivotal tool in driving awareness and engagement. This underscores the growing importance of digital platforms in HIV prevention efforts, as beneficiaries actively interact with the healthcare system, enhancing their access to critical information and services.

APIN's contributions have been impactful, with a significant portion of the beneficiaries attributing reductions in HIV/AIDS prevalence to the organization's initiatives. The study also revealed improvements in reproductive health access, further validating APIN's role in addressing broader health concerns. However, despite these successes, logistical challenges such as transportation difficulties and resource shortages persist. These obstacles, alongside mixed satisfaction ratings, suggest that there are areas within service delivery and resource management that require targeted improvements. Nevertheless, the beneficiaries generally perceive the treatment and services offered by APIN as effective.

While APIN's services are largely accessible and effective, addressing the underlying logistical and systemic barriers is essential for enhancing user satisfaction and optimizing health outcomes. Strengthening resource allocation, improving service delivery mechanisms, and expanding the use of digital platforms for broader awareness campaigns can significantly improve the reach and effectiveness of APIN services in Makurdi Metropolis. The findings suggest that a focused approach to resolving these issues will further consolidate the positive health impacts already achieved.

6. Recommendation

Based on the findings of this study, the following recommendations are proposed to improve the reach, effectiveness, and overall satisfaction with APIN services:

I. Expansion of social media campaigns to further increase engagement and deepen understanding of HIV prevention and APIN services. The Ministries of Health at both Federal and State levels, APIN, and other non-governmental organizations should intensify their social media campaigns. These campaigns should incorporate targeted content that addresses the specific needs of different demographic groups, leverage community influencers for broader reach, and utilize interactive educational content to foster a deeper understanding of HIV prevention strategies and APIN's healthcare offerings.

II. APIN and health agencies should conduct regular feedback sessions with beneficiaries to gauge service satisfaction and identify areas for improvement. This participatory approach will ensure that services remain responsive to community needs. Additionally, continuous staff training should be prioritized to enhance service delivery, focusing on fostering supportive and empathetic interactions with beneficiaries. Partnerships with other organizations should also be pursued to address the social determinants of health, such as nutrition and education, thereby creating a more holistic approach to healthcare provision.

III. APIN and healthcare agencies should explore partnerships with local transport services to offer subsidized or free transportation to beneficiaries. This will reduce the burden of transportation costs and improve access to services.

IV. Implementation of an appointment scheduling system to minimize wait times, thereby allowing for more efficient service delivery. Advocacy for increased funding is essential to ensure a steady supply of testing kits and medications.

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