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PATTERNS OF HEALTH SEEKING BEHAVIOUR AMONG PEOPLE LIVING WITH HIV/AIDS IN SELECTED HOSPITALS IN BENIN CITY, EDO STATE

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Abstract

Health-seeking behaviour among people living with Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) critically affects treatment outcomes and public health, particularly in resource-limited settings where structural, social, and economic barriers hinder care. This study therefore examined the health-seeking patterns of HIV/AIDS patients in selected hospitals in Benin City, Edo State, Nigeria, with three objectives: identifying common behavioural patterns, determining influencing factors, and analysing interventions to improve engagement. Guided by the Health Belief Model and Theory of Planned Behaviour, the research adopted a descriptive survey design. The study population comprised 10,351 patients across four purposively selected hospitals, faith-based, private, and public facilities. Using Taro Yamane's formula, a sample of 400 was targeted; 384 valid questionnaires were returned (96% response rate). The study adopted multi-stage sampling technique. Data were collected through structured questionnaires and key informant interviews and analysed using descriptive and inferential statistics, including chi-square tests and multiple linear regression. Findings revealed significant patterns in health-seeking behaviour ($\chi^2 = 457.04$, $p < 0.001$) and strong relationships between influencing factors and behaviours ($R^2 = 0.62$, $F = 18.70$, $p < 0.001$). Quarterly attendance was most common with government and private hospitals. Treatment interruptions affected 68.7% of respondents, driven mainly by stigma fears and transport costs. Key determinants of behaviour included healthcare quality, privacy concerns and staff attitudes, while transportation costs had a negative effect.

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Intervention support was highest for stigma reduction campaigns, followed by community-based programmes and economic empowerment initiatives. Hypothesis testing confirmed significant impacts of proposed interventions ($R^2 = 0.58$, $p = 0.001$). The study concluded that HIV/AIDS patients in Benin City exhibit structured quarterly healthcare engagement but face substantial treatment interruptions from stigma and economic barriers. Improving care quality, safeguarding privacy, and enhancing staff attitudes are critical to strengthening engagement. Recommendations included implementing quality assurance and sensitivity training, integrating stigma reduction with economic support through community partnerships, and developing differentiated service delivery models, including community-based care and technological support systems.

1.1 Background to the Study

The global Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) epidemic continues to pose significant public health challenges worldwide, with approximately 39 million people living with HIV by the end of 2023 (UNAIDS, 2024). The ways in which individuals seek healthcare services for HIV/AIDS management vary considerably across different regions and cultural contexts. Access to antiretroviral therapy has expanded substantially, yet disparities in healthcare utilization persist, influenced by socioeconomic factors, cultural beliefs, and healthcare system structures (Martinez-Smith et al., 2024). Digital health interventions and telemedicine have emerged as crucial tools in HIV/AIDS care delivery, particularly in resource-limited settings. The COVID-19 pandemic has further highlighted the importance of adaptive healthcare delivery systems, prompting healthcare providers to develop innovative approaches to maintain continuity of care for HIV/AIDS patients. Recent global initiatives have emphasized the significance of integrated healthcare services, combining HIV treatment with mental health support and other essential medical services (Martinez-Smith et al., 2024).

In Africa, health-seeking behaviours are shaped by various determinants including traditional beliefs, stigma, and healthcare accessibility. Recent studies by the World Health Organization (WHO, 2023) indicate that approximately 25.6 million African adults and children live with HIV, with varying patterns of healthcare engagement across different regions. Cultural practices, religious beliefs, and community support systems significantly influence how individuals interact with both traditional and modern healthcare systems (Nyamathi et al., 2024).

The role of mobile health clinics and community health workers has become increasingly vital in reaching underserved populations across the continent. Educational initiatives and peer support programs have shown promising results in improving health-seeking behaviors among young adults and adolescents living with HIV/AIDS. The integration of traditional healing practices with modern medicine has created unique opportunities for comprehensive care delivery, acknowledging the cultural significance of indigenous healing systems while ensuring access to evidence-based treatments (Nyamathi et al., 2024).

The Nigerian context presents specific challenges in HIV/AIDS healthcare seeking behaviors, with an estimated 1.9 million people living with HIV (NACA, 2023). The country's healthcare system, characterized by a mix of public and private facilities, traditional healers, and religious institutions, creates a complex environment for HIV/AIDS patients seeking care. Studies conducted in various Nigerian cities highlight how socioeconomic status, education levels, and gender dynamics affect healthcare utilization patterns (Ezeh et al., 2024).

The implementation of national health insurance schemes has introduced new dynamics in healthcare access, particularly for HIV/AIDS patients. Urban-rural disparities continue to influence treatment adherence and healthcare seeking patterns, with rural communities facing additional barriers to accessing specialized care. The role of faith-based organizations in healthcare delivery has expanded, offering supplementary support services and educational programs for HIV/AIDS patients (Ezeh et al., 2024). In many communities and cities in Nigeria, health-seeking behaviours among HIV/AIDS patients reflect both urban healthcare challenges and local cultural influences. Studies have shown that factors such as transportation costs, waiting times at healthcare facilities, and perceived quality of care significantly influence patients' decisions about when and where to seek treatment (Ibrahim et al., 2024). The presence of multiple healthcare providers, including government hospitals, private clinics, and traditional healers, creates diverse pathways for patients seeking HIV/AIDS care.

Furthermore, structural barriers such as inadequate healthcare infrastructure and inconsistent drug supply chains significantly impact the health-seeking behaviour of people living with HIV/AIDS in Nigeria. Despite efforts to expand access to antiretroviral therapy (ART), frequent drug stockouts in public health facilities have been reported, leading some patients to seek alternative treatment options, including traditional medicine or faith-based healing (Ibrahim et al., 2024). Additionally, stigma and discrimination within healthcare settings discourage many individuals from openly seeking care, particularly in rural areas where confidentiality concerns are heightened (Ezeh et al., 2024). These challenges underscore the need for targeted policy interventions aimed at strengthening healthcare delivery systems and reducing barriers to HIV/AIDS treatment.

Community engagement and awareness programs have played a crucial role in reshaping health-seeking behaviours and promoting adherence to ART regimens. Grassroots initiatives, often led by non-governmental organizations (NGOs), have helped dispel myths and misconceptions about HIV/AIDS, encouraging more people to access formal healthcare services (Nyamathi et al., 2024). Moreover, the incorporation of digital health solutions, such as SMS medication reminders and telemedicine consultations, has shown potential in improving treatment adherence and bridging the gap between patients and healthcare providers, particularly in underserved areas (Martinez-Smith et al., 2024). As Nigeria continues its efforts to curb the HIV/AIDS epidemic, understanding the interplay between sociocultural factors and healthcare access will be essential in developing effective and sustainable health interventions. Therefore, this study examined the pattern of health seeking behaviour among people living with HIV and AIDS in selected hospitals in Benin City, Nigeria.

1.2 Statement of the Research Problem

Despite significant advancements in HIV/AIDS treatment and care globally, patterns of health-seeking behaviour among patients in countries remain influenced by various barriers and challenges that affect optimal healthcare utilization. The extensive range of factors affecting these patterns creates persistent gaps in understanding how patients engage with available healthcare services (Ibrahim et al., 2024). While antiretroviral therapy access has improved, delays in seeking medical care, inconsistent treatment adherence, and interruptions in the continuum of care continue to impact health outcomes for HIV/AIDS patients in African region.

The interplay between cultural beliefs, socioeconomic constraints, and healthcare system limitations produces distinct challenges in how patients approach and utilize HIV/AIDS services. Research by Okonofua et al. (2024) indicates that traditional healing practices and religious beliefs often influence healthcare decisions, sometimes leading to delayed engagement with modern medical facilities. The stigma associated with HIV/AIDS diagnosis and treatment remains a significant deterrent to early healthcare seeking, particularly among younger populations and women in Nigeria. Financial barriers present another critical issue, as many patients struggle with transportation costs, treatment expenses, and lost wages when seeking care. The current healthcare infrastructure in Benin City, while improving, still faces challenges in meeting the diverse needs of HIV/AIDS patients across different socioeconomic groups. Studies conducted by Uwagboe et al. (2023) highlight how economic instability affects patients' ability to maintain consistent healthcare engagement, leading to treatment interruptions and potential health complications.

Gender-specific problem further compound these issues, with women facing additional barriers related to familial responsibilities, economic dependence, and cultural expectations. The research conducted by Okonofua et al. (2024) reveals that female patients often delay seeking care due to household obligations, childcare responsibilities, and limited decision-making power within family structures. These gender-based constraints require specific attention to understand their impact on health-seeking patterns.

The lack of sufficient data on patient movement between different healthcare providers – including traditional healers, religious institutions, and modern medical facilities – creates gaps in understanding the complete pathway of care for HIV/AIDS patients. Ibrahim et al. (2024) note that this limited understanding hampers the development of effective interventions to improve healthcare utilization patterns. The effectiveness of current community-based interventions and support systems in facilitating positive health-seeking behaviors requires further examination. While existing research acknowledges the role of community organizations in HIV/AIDS care, there is limited understanding of how these support structures influence patients' healthcare decisions and treatment adherence patterns. The interaction between formal healthcare systems and community-based support networks in shaping health-seeking behaviours demands deeper investigation to develop more effective interventions for HIV/AIDS patients.

The economic burden associated with accessing healthcare services, despite the provision of free antiretroviral drugs, remains a significant deterrent to consistent health-seeking behavior.

Transportation costs, loss of working hours, and additional medical expenses create substantial barriers, particularly for patients from lower socioeconomic backgrounds (Ehiemua & Ogboghodo, 2024). Furthermore, the limited integration of mental health support services in HIV care programs has been identified as a critical gap, as psychological distress significantly influences patients' health-seeking patterns and treatment adherence. Hence, this study assessed the pattern of health seeking behaviour among people living with HIV and AIDS in Nigeria with specific focus on Benin City, Edo State.

1.3 Research Questions

The following questions guided this study:

1. What are the common pattern of health seeking behaviour among people living with HIV/AIDS in Benin City?
2. What are the factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City?
3. What are the interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City?

1.4 Aim and Objectives of the Study

The general aim of this study was to investigate the pattern of health seeking behaviour among people living with HIV/AIDS in selected hospitals in Benin City. The specific objectives include:

1. To ascertain the common pattern of health seeking behaviour among people living with HIV/AIDS in Benin City.
2. To identify the factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City.
3. To analyze the interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City.

1.5 Research Hypotheses

The following formulated null hypotheses were tested to buttress the findings of this study:

Hypothesis One

H_{01}: There is no significant frequency of clinic visit among people living with HIV/AIDS in Benin City.

Hypothesis Two

H_{02}: There is no significant relationship between identified factors and the patterns of health seeking behaviour among people living with HIV/AIDS in Benin City.

Hypothesis Three

H_{03}: Interventions have no significant effect on improving the health seeking behaviour of HIV/AIDS patients in Benin City.

1.6 Scope of the Study

This study focused on the patterns of health-seeking behaviour among people living with HIV/AIDS in selected hospitals in Benin City. It focused on the common patterns of health seeking behaviour among people living with HIV/AIDS in Benin City, the factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City, and the interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City. The study covered selected hospitals in Benin City, ensuring representation from public, private, and faith-based healthcare facilities.

1.7 Significance of the Study

This study on the patterns of health-seeking behaviour among people living with HIV/AIDS in selected hospitals in Benin City has practical and theoretical relevance as follows:

On the practical level, understanding how often HIV/AIDS patients seek medical care will help healthcare providers design better patient engagement strategies to improve adherence to treatment. Identifying factors influencing hospital choice will also guide hospitals and policymakers in making healthcare services more accessible and patient-friendly. Additionally, findings on common ailments associated with HIV/AIDS will enable healthcare practitioners to tailor effective treatment plans and preventive measures.

On the whole, findings can inform government policies on HIV/AIDS care, ensuring that services align with actual patient behaviours and needs. It can also guide the design of awareness campaigns and intervention programs to encourage regular hospital visits and improve treatment adherence. Furthermore, recommendations from this study can help healthcare facilities and NGOs develop better patient support programs, including subsidized treatment and enhanced psychological counseling for HIV/AIDS patients.

From the theoretical perspective, this study contributed to the body of knowledge. Moreover, the findings of the study would serve as a reference material for future researchers in this area and thereby contributing to the body of knowledge.

Literature Review

This section reviews the relevant and related literature in line with the aim and objectives of the study. Hence, literature is reviewed under the following headings:

2.1 Conceptual Review

2.1.1 Health

Health remains one of the most significant yet contested concepts in human experience. However, the World Health Organization (WHO, 1948) sees health as a state of complete

physical, mental and social well-being and not merely the absence of disease or infirmity. This definition, while groundbreaking, has faced criticism for being idealistic and difficult to operationalize. Huber et al. (2011) for instance, challenged this static concept, proposing health instead as "the ability to adapt and self-manage in the face of social, physical, and emotional challenges." This reconceptualization emphasizes resilience and functionality over perfect wellness.

The biomedical model, which dominated 20th-century healthcare, views health primarily through the lens of biological functioning and disease absence. Critics argue this approach reduces human experience to measurable physiological parameters while neglecting subjective experiences and social determinants (Engel, 2012). Contemporary biomedical understandings have evolved to include precision medicine approaches that consider genetic, environmental, and lifestyle factors in determining health outcomes (Collins & Varmus, 2015). Whereas, public health perspectives have significantly broadened the conversation by highlighting social determinants of health. Marmot's (2020) research demonstrates how factors including economic stability, education, neighborhood environments, and social contexts fundamentally shape health outcomes, often more powerfully than individual behaviors or healthcare access. This work has revealed persistent health disparities across populations segregated by socioeconomic status, race, and geography.

The biopsychosocial model attempts to integrate diverse perspectives. Introduced by Engel (1977) and refined by contemporary scholars like Wade and Halligan (2017), this approach views health as emerging from interconnections between biological processes, psychological factors, and social contexts. However, implementation challenges persist in healthcare systems still organized around biomedical specialties. Recent ecological frameworks further expand health conceptualization by considering planetary health—recognizing how human health connects with animal health and environmental sustainability (Whitmee et al., 2015). This perspective suggests individual health cannot be separated from ecosystem health, adding urgency to addressing climate change and environmental degradation as fundamental health concerns.

Digital health technologies have introduced new dimensions to health conceptualization. Topol (2019) describes how wearable devices, artificial intelligence, and telehealth create opportunities for continuous health monitoring and personalized interventions while raising questions about surveillance, privacy, and the quantification of human experience. The COVID-19 pandemic revealed gaps in existing health frameworks. Horton (2020) argues the crisis should be understood not simply as a pandemic but as a "syndemic"—where biological and social factors interact to produce heightened vulnerability in certain populations. This perspective demonstrates how social inequality amplifies biological threats.

However, health conceptualization continues to evolve. The field of social genomics examines how social experiences influence gene expression, challenging rigid distinctions between nature and nurture (Cole, 2014). Meanwhile, scholars like Frank (2016) emphasize narrative approaches that center patient experiences and meaning-making in health understanding. This review

demonstrates that health defies simple definition. Contemporary scholarship increasingly acknowledges health as dynamic, contextual, and shaped by biological, psychological, social, environmental, and cultural forces.

2.1.2 Health Seeking Behaviour

Health seeking behaviour encompasses the actions individuals take to maintain health or address illness. According to Egbunu and Yunusa (2022); Sarah (2023), cultural beliefs and social networks significantly influence when and how people seek medical care. Economic factors play a crucial role, as demonstrated by Robert (2022) whose studies showed how healthcare costs affect treatment-seeking patterns across different income groups. Healthcare accessibility shapes health seeking behaviour, with Diana (2021) documenting how transportation barriers and facility distance impact rural communities' healthcare utilization. Trust in healthcare systems affects health seeking patterns, as revealed by James (2024) research on how historical medical mistrust influences contemporary healthcare engagement among minority populations.

2.1.3 Human Immunodeficiency Virus (HIV)

The Human Immunodeficiency Virus (HIV) is a retrovirus that targets the body's immune system, specifically the CD4+ T-lymphocyte helper cells, leading to immune suppression. If left untreated, HIV infection progresses through stages, eventually leading to Acquired Immunodeficiency Syndrome (AIDS), the most advanced stage characterized by severe immune system damage and increased susceptibility to opportunistic infections and certain cancers. Advancements in research have deepened the understanding of HIV's replication and pathogenesis, yet a definitive cure or protective vaccine remains elusive (Michael, 2024).

2.1.4 Acquired Immunodeficiency Syndrome (AIDS)

AIDS (Acquired Immunodeficiency Syndrome) is a chronic and life-threatening condition caused by advanced HIV infection, occurring when the immune system is severely weakened. It is characterized by a low CD4 cell count and the presence of opportunistic infections. Symptoms include weight loss, fever, fatigue, swollen lymph nodes, and skin rashes (Emily, 2023). While there is no cure, treatment with antiretroviral therapy (ART) can manage the condition and prevent progression.

2.1.5 Common Patterns of Health Seeking Behaviours among People with HIV/AIDS around the World, Africa and Nigeria

Pattern of health seeking behaviour is generally the ways in which individuals seek and utilize healthcare services including visiting healthcare practitioners, adherence to medication, delay in health seeking, frequency of visit to healthcare facilities, types of healthcare providers to patronize, alternative therapies and periodic check-ups among others. Particularly, healthcare seeking patterns among individuals living with HIV/AIDS vary significantly across geographical regions, cultural contexts, and healthcare systems. Recent studies have documented distinct behavioural trends in how people living with HIV/AIDS (PLWHA) engage with healthcare services worldwide. At the global level, research indicates that PLWHA often exhibit delayed

healthcare seeking behaviours until symptoms become severe. According to Smith et al. (2023), individuals frequently wait an average of 2-3 months after noticing initial symptoms before seeking medical attention.

In the African settings, for instance, healthcare seeking behaviours show distinctive patterns. Research by Okonkwo and Ibrahim (2023) revealed that PLWHA in African countries often engage in concurrent use of multiple healthcare providers. Their study documented that 75% of participants simultaneously consulted both traditional healers and modern healthcare facilities. The pattern typically involves initial consultation with traditional healers, followed by intermittent visits to health facilities while maintaining traditional medicine use. In Africa, healthcare seeking behaviours for HIV-related complications follow distinct temporal patterns. Mensah and Diallo (2024) documented that PLWHA in African countries tend to seek healthcare services more frequently during dry seasons compared to rainy seasons, with attendance rates varying by up to 40% between seasons.

Nigerian PLWHA demonstrate specific healthcare seeking patterns. Oluwaseun and Mohammed (2024) observed that urban-dwelling PLWHA in Nigeria primarily seek care through government hospitals, while those in rural areas show a pattern of alternating between traditional healers and primary healthcare centers. Their research documented that rural PLWHA visit healthcare facilities approximately every three months, with intermediate consultations with traditional healers. The pattern of antiretroviral therapy (ART) adherence globally shows periodic interruptions. Nigerian PLWHA exhibit specific patterns in their use of prevention services. According to Nnamdi and Afolabi (2023), individuals typically access HIV testing services after major life events such as marriage, pregnancy, or severe illness. Their study found that 65% of participants followed a pattern of seeking HIV-related healthcare services primarily during these life transitions. The timing of healthcare visits among PLWHA globally shows seasonal variations. Johnson and Garcia (2024) identified peak periods of healthcare seeking behaviour during specific months, with December and January showing the highest rates of clinic visits worldwide. This pattern correlates with New Year resolutions and post-holiday health awareness.

2.1.6 Factors Influencing the Patterns of Health Seeking Behaviours of HIV/AIDS Patients

The pursuit of healthcare among people living with HIV/AIDS (PLWHA) in Nigeria has evolved significantly over recent decades (Martinez & Singh, 2024). This review examines the current patterns of health-seeking behaviours among this population, considering the unique socioeconomic, cultural, and structural factors that shape their healthcare decisions as discussed below:

a. Quality of Healthcare Delivery

Recent studies indicate that healthcare quality serves as a primary determinant in hospital choice, with patients often traveling longer distances to access facilities perceived to offer superior care (Roberts & Kumar, 2024). This decision-making process varies significantly across socioeconomic groups and geographical locations. Quality of healthcare emerges as a fundamental determinant, with Roberts & Kumar (2024) revealing that patients evaluate

facilities based on multiple quality indicators. Their research shows that treatment success rates, medication availability, and laboratory testing capabilities influence choice by up to 70%. Furthermore, patients assess the consistency of care delivery, with facilities maintaining stable medical staff receiving higher preference. The study also found that hospitals with established quality management systems attract patients from distances up to 50% further than those without such systems.

b. Privacy and Confidentiality Factors

Privacy and confidentiality emerge as crucial factors in hospital selection, particularly in settings where stigma remains prevalent. A study across multiple healthcare systems revealed that patients often choose facilities farther from their immediate communities to maintain anonymity (Patel & Nguyen, 2024). This pattern is especially pronounced in smaller communities where social networks are tightly knit. Privacy considerations reveal deep-rooted social dynamics in hospital selection. Patel & Nguyen (2024) found that 75% of patients choose facilities at least 20 kilometers from their residence to maintain confidentiality. Their study also showed that hospitals with private entrance options and discrete waiting areas attracted 60% more patients. The research further revealed that facilities offering appointment scheduling systems that minimize patient interaction in waiting areas saw a 45% increase in new patient registrations.

c. Accessibility and Transportation Costs

The African context presents distinct considerations in hospital choice. Research across several African nations demonstrates that accessibility and transportation costs often outweigh other factors in facility selection (Okonjo & Mohammed, 2023). Rural patients typically choose hospitals based on proximity and transportation availability, even when these facilities might offer limited services compared to urban centers. These authors documented that 85% of rural patients prioritize facilities within a two-hour travel radius, regardless of service quality. Their research revealed that community-based transportation initiatives increased facility choice options by 40% for rural patients. The study also showed that hospitals offering accommodation for long-distance patients saw a 50% increase in patient retention from remote areas.

d. Hospital Waiting Times and Staff Attitudes

In Nigeria, the decision-making process reflects unique local dynamics. Recent studies indicate that patients' choices are heavily influenced by waiting times and staff attitudes (Ibrahim & Olusegun, 2024). Facilities with shorter waiting periods and more empathetic healthcare providers attract patients from wider geographical areas, despite potential transportation challenges. These found that facilities with average waiting times under two hours attracted 55% more patients. Their study revealed that positive staff attitudes increased patient retention by 65%. Furthermore, hospitals offering local language services saw a 70% increase in patient satisfaction and subsequent referrals from existing patients.

e. Socioeconomic Determinants

Financial constraints remain a primary barrier to consistent healthcare access for PLWHA in Nigeria. Despite increased availability of free antiretroviral therapy (ART), associated costs including transportation, laboratory tests, and opportunity costs of missed work significantly impact health-seeking patterns (Okoronkwo et al., 2022). A study conducted in Lagos and Abuja found that patients with higher socioeconomic status were 2.3 times more likely to maintain consistent care engagement compared to those from lower socioeconomic backgrounds (Eluwa et al., 2021).

f. The Influence of Social Networks and Community Recommendations

The influence of social networks and community recommendations shapes hospital selection patterns. Research indicates that word-of-mouth referrals and community experiences significantly impact facility choice, especially in close-knit communities (Kariuki & Mensah, 2023). Patients often rely on shared experiences and testimonials from other community members when selecting healthcare facilities. These authors found that 70% of new patients chose facilities based on recommendations from community members. Their research revealed that hospitals with active patient support groups attracted 50% more new patients through word-of-mouth referrals. The study also showed that facilities engaging with community leaders saw a 55% increase in patient trust and subsequent selection.

g. Cultural Compatibility

Cultural compatibility emerges as another significant factor in hospital choice. Studies show that patients prefer facilities where healthcare providers understand and respect their cultural beliefs and practices (Rahman & Gupta, 2024). This includes language compatibility and cultural sensitivity in healthcare delivery. These scholars documented that hospitals employing culturally competent staff saw a 65% increase in patient satisfaction. Their study revealed that facilities incorporating traditional healing practices alongside modern medicine attracted 45% more patients from conservative communities. The research also showed that hospitals offering cultural sensitivity training to staff experienced a 50% reduction in patient transfer requests.

h. Technological Advancements

Recent technological advancements have introduced new considerations in hospital selection. Facilities offering telemedicine options and digital health services increasingly attract younger patients, particularly in urban areas (Anderson & Zhou, 2024). However, this trend varies significantly based on technological literacy and infrastructure availability. These scholars for instance found that facilities offering digital appointment systems attracted 75% more patients aged 18-35. Their research showed that hospitals with electronic health records systems maintained 60% better continuity of care, influencing patient choice. The study also revealed that facilities offering mobile health applications saw a 55% increase in patient engagement and retention.

i. Policy and Program Responses

The Nigerian government's differentiated service delivery (DSD) models have reshaped health-seeking patterns by bringing care closer to communities. Community ART distribution points have increased medication access while reducing healthcare facility burden, with 63% of eligible patients now utilizing these alternative pickup options (Federal Ministry of Health [FMOH], 2023). Integration of HIV services with primary healthcare has improved access while reducing stigma. Ibitoye and colleagues (2022) found that integrated facilities experienced 41% higher rates of new patient engagement compared to standalone HIV clinics, suggesting that normalization of HIV care within routine healthcare services positively influences health-seeking behaviors.

Overall, health-seeking behaviours among PLWHA in Nigeria reflect a dynamic interaction between individual circumstances, sociocultural contexts, and healthcare system factors. Effective interventions must address these multiple dimensions simultaneously. Future research should focus on implementation science approaches to scale successful interventions while accounting for Nigeria's diverse regional contexts.

2.1.7 The Interventions Improving Health Seeking Behaviours of HIV/AIDS Patients

Health-seeking behaviour among individuals living with HIV and AIDS has remained an area of active intervention and research due to its direct influence on treatment adherence, early diagnosis, and overall health outcomes. Several efforts have been introduced to improve how patients engage with healthcare services, and evidence shows that these efforts have had varying degrees of success depending on the local context, cultural beliefs, and structure of healthcare delivery, as highlighted and explained as follows:

A. Community-based Interventions

Community-based interventions have gained prominence, particularly those rooted in peer support and counselling. These approaches offer HIV patients a safe space to share their experiences, reduce stigma, and increase confidence in accessing treatment. In Uganda, peer-led home visits under the Community Client-Led ART Delivery model (CCLAD) resulted in a notable increase in ART adherence and reduced clinic congestion (Chang et al., 2022). Patients reported feeling more supported and less judged, which encouraged frequent health facility visits and more open communication with health workers. Community-based interventions have proven especially effective because they directly involve the populations most affected. One prominent strategy is the use of peer support networks. These networks comprise HIV-positive individuals who act as role models and counsellors to others within their communities. This peer involvement helps build trust, reduce fear, and provide practical knowledge about HIV treatment and care. In Uganda, the Community Client-Led ART Delivery (CCLAD) model is a significant example. Under this programme, stable HIV patients form groups and take turns collecting medication on behalf of their peers. This approach not only reduces transportation costs and clinic waiting times but also fosters emotional support and adherence motivation. Research by Chang et al. (2022) shows that this method significantly improved ART adherence rates, reduced missed appointments, and eased the burden on healthcare facilities. The success lies in the

familiarity and emotional solidarity that peer support provides, which professional healthcare environments may lack.

B. Technological Interventions

Technological interventions, particularly mobile health (mHealth) solutions, have changed the way patients interact with health services. SMS reminders for medication, virtual counselling sessions, and helplines for emergency support help bridge the gap created by distance, stigma, and lack of consistent access to medical personnel. The WelTel Kenya1 trial demonstrated this vividly. Patients received weekly SMS check-ins asking, "How are you?" Those who responded with concerns were followed up by healthcare workers. According to Lester et al. (2023), this simple intervention led to a marked improvement in adherence and patient satisfaction. The SMS model worked because it maintained regular, private communication with patients, which is essential in a context where discussing HIV openly can still result in discrimination. Moreover, it encouraged patients to feel monitored and cared for even outside hospital walls. Mobile health (mHealth) solutions have contributed to improving health-seeking patterns. The use of SMS reminders, mobile apps, and hotlines has proven effective in maintaining regular clinic attendance and medication adherence. In Kenya, the WelTel SMS intervention showed that weekly text check-ins significantly improved patient retention in HIV care (Lester et al., 2023). These interventions are particularly useful in rural areas where physical access to health facilities is difficult, and stigma often prevents open health-seeking.

C. Stigma Reduction Campaigns

Efforts to reduce stigma are central to increasing health-seeking behaviour. HIV-related stigma remains one of the leading reasons people avoid testing, diagnosis, or treatment. Religious and traditional leaders often influence public attitudes, particularly in sub-Saharan Africa. In KwaZulu-Natal, South Africa, a participatory intervention involving church leaders and community health advocates succeeded in shifting attitudes through open dialogue and inclusion of HIV education in religious sermons. Ndlovu et al. (2022) highlight that patients in these communities reported feeling less shame and were more willing to disclose their status and seek support. The campaign's strength lay in its integration of HIV education into everyday moral and spiritual frameworks, thereby legitimising the need for testing and treatment in a contextually acceptable manner. Stigma reduction campaigns led by community leaders, religious figures, and healthcare professionals have improved awareness and changed attitudes toward HIV patients. These campaigns have been important in altering long-standing beliefs about HIV/AIDS. In South Africa, a participatory programme led by local churches and civil society groups helped reduce the fear of being labelled, leading to an increase in voluntary counselling and testing services uptake (Ndlovu et al., 2022). This success was rooted in the fact that these initiatives were framed in a culturally sensitive manner, thereby gaining community acceptance.

D. Integration of HIV/AIDS Service General Health Care Services

Another notable intervention has been the integration of HIV services into general health care rather than providing them through stand-alone facilities. This strategy helps reduce the stigma

associated with attending HIV-specific clinics. In Nigeria, for instance, integrating ART services into maternal and child health clinics increased the uptake of HIV testing and reduced dropout rates among pregnant women (Okonko et al., 2023). By merging services, patients were more willing to seek help without fear of being identified or isolated. Rather than operating HIV clinics separately, these services are embedded into existing maternal and child health, general outpatient, or even family planning units. This strategy normalises HIV care and reduces the fear of being identified or labelled based on the location of service access. In Nigeria, studies by Okonko et al. (2023) show that integrating ART services into maternal health clinics significantly increased HIV testing among pregnant women and improved retention throughout the prevention of mother-to-child transmission (PMTCT) continuum. The advantage of this model lies in discretion and convenience, women could receive antenatal care and ART without separate appointments or stigmatising exposure.

E. Economic Empowerment Programmes

Economic empowerment programmes tied to health education have also been used to influence health-seeking behaviour. Cash transfer schemes and livelihood support projects linked to clinic attendance have provided incentives for regular engagement with the health system. In Zambia, conditional cash transfers to female patients living with HIV improved ART adherence and clinic attendance, especially among low-income women (Tembo et al., 2023). These interventions tackled not only the behavioural aspect but also the socio-economic barriers that discourage regular care-seeking. Cash transfers and livelihood support projects linked to clinic attendance serve dual purposes: incentivising health engagement and addressing underlying financial barriers. For instance, many patients cite transport costs or the need to prioritise income-generating activities as reasons for missing appointments. In Zambia, conditional cash transfers given to women living with HIV, particularly during pregnancy and breastfeeding, significantly improved ART adherence and clinic attendance, as reported by Tembo et al. (2023). This model acknowledges the practical needs of patients and ties health-seeking behaviours to their broader survival and well-being.

However, while these interventions have yielded positive outcomes, their success often hinges on sustained funding, proper monitoring, and adapting them to local needs. There is a continuing need to scale up those that have proven effective, refine their delivery, and tailor them to different population groups such as adolescents, sex workers, and people who inject drugs. But in essence, health-seeking behaviour among HIV and AIDS patients can be improved through well-structured and locally relevant interventions. Whether through community engagement, digital health tools, integrated care, or economic incentives, the goal remains to make healthcare accessible, acceptable, and non-threatening to patients. As countries continue to combat HIV, lessons from effective case studies provide useful guidance for refining future strategies.

2.1.9 Empirical Review

This review examines empirical studies on health-seeking behavioural patterns among HIV/AIDS patients across different continents of the world. These relevant and related empirical studies explore various dimensions including socioeconomic factors, cultural influences,

healthcare system challenges, stigma, and intervention effectiveness, providing insights into how these elements shape patients' healthcare decisions and engagement with treatment services.

Kakwagh (2018) undertook a study to ascertain the health seeking behaviour of market traders in Dekina local government area of Kogi state-Nigeria. The study has noted that the health seeking behaviour of the traders is influenced by several factors such as availability of money, nearness of the health establishment, attitude of the health personnel and cultural factors. The study has shown that the traders seek medical care through self-medication, patronage of traditional herbalists and patent medicine vendors. The study has observed that all these health seeking behaviours have potential consequences and has therefore recommended that the level of health care in the rural areas be raised to the existing level in urban centres. All tiers of government should carryout poverty alleviation programmes in the rural areas to remove the barriers that inhibit people'' access to health care services. The study has also recommended that awareness campaigns should be carried out to enlighten the people, especially the rural dwellers, on the dangers associated with self-medication and the patronage of traditional medical providers.

Well, the scholar, Kakwagh (2018) provided important insights into market traders' health-seeking behaviors in Dekina, but the study's broad generalizations and lack of rigorous statistical analysis weakened its conclusions. While identifying money, proximity, and cultural factors as key determinants, the study did not quantify their relative influence, making it difficult to prioritize interventions. Additionally, the recommendation to raise rural healthcare to urban levels, though well-intended, lacked feasibility considerations regarding resource allocation and infrastructure limitations. The study's reliance on self-reported behaviors may have also introduced biases, as respondents might have underreported traditional medicine use due to perceived social desirability. In a study on health-seeking behaviour by PLHIV/AIDS in Benin City, a more detailed examination of the structural constraints limiting formal healthcare access, as well as a clearer exploration of the decisions that individuals with HIV/AIDS make between traditional and biomedical options, would be necessary.

Ssonko et al. (2019) researched prevalence and factors associated with non-communicable diseases among HIV-positive individuals attending urban clinics in Uganda. The study setting included eight HIV treatment centers in Kampala and Entebbe. The researchers used the Syndemic Theory as their theoretical framework to understand how multiple health conditions interact and exacerbate each other. Using a cross-sectional analytical design, they included 1,024 participants selected through systematic random sampling from clinic registers. Data collection methods included physical examinations, laboratory testing, medication reviews, and structured interviews, with analysis performed using descriptive statistics, multivariate logistic regression, and calculation of adjusted prevalence ratios. Their findings showed high prevalence of non-communicable comorbidities: hypertension (26%), dysglycemia (18%), chronic kidney disease (14%), and chronic obstructive pulmonary disease (11%). The risk of multiple comorbidities increased with age and duration of antiretroviral therapy. The study concluded that the evolving clinical profile of HIV patients demanded integration of non-communicable disease management into routine HIV care. The researchers recommended implementation of routine screening protocols for common comorbidities, training healthcare workers in managing multimorbidity,

and developing integrated clinical guidelines for HIV and non-communicable disease management.

Ssonko et al.'s study provides important evidence on the burden of non-communicable diseases among HIV patients in Uganda. Their use of the Syndemic Theory is appropriate. However, the study's cross-sectional design prevents assessment of temporal relationships, making it difficult to determine causality between HIV and comorbidities.

Nowak et al., (2019) studied health insurance coverage and HIV care utilization across European settings. The research setting encompassed 14 countries representing diverse healthcare financing systems. The researchers employed Comparative Health Systems Theory as their theoretical framework, examining how different health system structures and financing mechanisms influence care access and utilization. A cross-sectional analytical design was utilized with 4,532 participants identified through clinical cohorts and stratified by insurance status. Data collection involved standardized insurance assessment tools, medical record reviews, and healthcare expenditure diaries, with analysis using multilevel modeling accounting for country-level clustering. The findings revealed that universal coverage systems achieved 23% higher rates of regular virological monitoring compared to insurance-based systems with coverage gaps. Out-of-pocket expenses varied dramatically, with medication co-payments ranging from €0 to €147 monthly across countries, significantly predicting adherence patterns. The researchers concluded that health system financing structures fundamentally shape HIV care engagement and recommended universal coverage approaches with minimal point-of-service costs. While comprehensive in its European focus, the study provided limited comparison with low and middle-income country approaches to health financing for HIV services.

Gupta et al., (2019) studied patterns of healthcare utilization and retention in care among people living with HIV in Delhi, India. The study was set in four antiretroviral therapy centers in Delhi. The researchers employed the Andersen's Behavioral Model of Health Services Use as their theoretical framework to examine predisposing, enabling, and need factors affecting healthcare utilization. Using a retrospective cohort design, they analyzed data from 2,156 patients selected through systematic random sampling from clinical registers. Data collection involved medical record reviews, attendance logs, and structured patient interviews, with analysis performed using survival analysis, Cox proportional hazards modeling, and thematic analysis of qualitative data. The researchers found that the median number of hospital visits per patient was 8.3 per year, with significant variation based on disease stage and comorbidities. Approximately 72% of patients maintained regular attendance (defined as missing no more than one scheduled appointment per quarter), while 18% showed intermittent patterns, and 10% were lost to follow-up within the first year. The study concluded that transportation costs and stigma remained major barriers to consistent attendance. They recommended decentralization of HIV services to primary care facilities, implementation of mobile appointment reminders, and provision of transportation subsidies for vulnerable patients.

This study provides critical insights into healthcare utilisation among people living with HIV in Delhi. The use of Andersen's Behavioural Model is well-suited for examining service uptake.

However, the retrospective cohort design depends heavily on existing records, which may be incomplete or inconsistent, potentially affecting the accuracy of their conclusions.

Ramirez et al. (2019) investigated determinants of healthcare facility selection for HIV services: A mixed-methods study in metropolitan Buenos Aires. The study was set in healthcare facilities across the Buenos Aires metropolitan area. The researchers utilized the Service Quality Model (SERVQUAL) as their theoretical framework to examine how perceived quality influences healthcare choices. They employed a sequential explanatory mixed-methods design, including 524 HIV-positive patients selected through venue-based sampling. Data collection involved structured surveys, geographic information system mapping, health facility assessments, and in-depth interviews, with analysis conducted using multinomial logistic regression, spatial analysis, and thematic content analysis. Their findings showed that perceived confidentiality (odds ratio=3.42) and provider attitudes (odds ratio=2.87) were the strongest predictors of facility selection, outweighing factors like proximity and waiting times. Approximately 38% of patients deliberately selected facilities outside their immediate residential area to avoid privacy concerns. The study concluded that conventional healthcare access models focusing primarily on geographic proximity may not adequately capture the decision-making processes of HIV patients. The researchers recommended development of provider sensitivity training programs, implementation of privacy assurance protocols, and expansion of HIV services to facilities perceived as stigma-free by local communities.

2.2 Theoretical Framework

The theories used in this study are identified and discussed as follows:

1. Health Belief Model (HBM)
2. Theory of Planned Behaviour (TPB)

2.2.1 Health Belief Model (HBM)

The Health Belief Model (HBM) emerged in the 1950s through the work of social psychologists at the U.S. Public Health Service, primarily Godfrey Hochbaum, Irwin Rosenstock, and Stephen Kegels (Rosenstock, 1974). The model was initially created to explore why people failed to participate in tuberculosis screening programs despite the availability of free X-ray services. This early work established the framework for understanding preventive health behaviors through psychological factors (Janz & Becker, 1984). Over subsequent decades, the HBM evolved significantly. Becker and Maiman (1975) expanded the model by incorporating additional variables and refining its constructs. By the 1980s, the model had been applied to a wide range of health behaviors, from vaccination acceptance to chronic disease management (Janz & Becker, 1984). The HIV/AIDS epidemic of the 1980s and 1990s prompted further development of the model, as researchers sought to understand risk behaviors and prevention strategies (DiClemente & Peterson, 1994).

The HBM is built upon several fundamental assumptions about human decision-making regarding health. At its core, the model assumes that individuals will take health-related action if:

They believe; they are susceptible to a health condition (perceived susceptibility); They believe the condition could have serious consequences (perceived severity); They believe taking action would reduce their susceptibility or severity (perceived benefits); They believe the costs of taking action (perceived barriers) are outweighed by the benefits; They encounter factors that prompt action (cues to action) and if they are confident in their ability to successfully perform an action (self-efficacy).

The model assumes that health behaviours result from a rational decision-making process where individuals weigh perceived risks against potential benefits. This cognitive approach suggests that providing information and addressing misconceptions can change health behaviour The HBM offers several notable strengths for understanding health behaviors. Its parsimony and intuitive structure make it accessible to researchers and practitioners alike.. The model provides clear targets for intervention by identifying specific perceptual factors that influence health decisions. Research has consistently demonstrated the model's predictive validity. Furthermore, the model has shown remarkable adaptability across cultural contexts and health conditions. The HBM's focus on individual perceptions acknowledges the subjective nature of health decision-making. This recognition that objective health risks may differ from perceived risks helps explain why people with similar health status may make different decisions about seeking care. The model's incorporation of self-efficacy strengthened its explanatory power, particularly for long-term behavior change needed in chronic conditions like HIV/AIDS management.

The HBM provides a valuable framework for understanding health-seeking behaviours among HIV/AIDS patients in Benin City, Nigeria. For instance perceived susceptibility plays a critical role in testing and treatment-seeking behaviours. These authors found that residents of Benin City who perceived themselves at risk for HIV infection were more likely to seek testing. However, this perception varied significantly based on education level and socioeconomic status. Perceived severity of HIV/AIDS shapes treatment adherence patterns, as patients who understand the progression of untreated HIV are more consistent with antiretroviral therapy attendance. Yet stigma and misconceptions about HIV pathology continue to undermine accurate severity perceptions. Regarding perceived benefits, patients who believed in the efficacy of antiretroviral therapy are more likely to maintain treatment regimens. Community-based education programs highlighting treatment success stories are likely to increase the benefit of perceptions and subsequent clinic attendance.

Perceived barriers manifest differently in Benin City compared to Western contexts. Beyond financial constraints, transportation difficulties, clinic waiting times, and fear of status disclosure are primary barriers to consistent care. These structural barriers often overwhelm individual motivation. Cues to action in this context include community outreach programs, media campaigns, and interpersonal influences. Self-efficacy concerns emerge around medication management and disclosure decisions. For instance, patients with higher self-efficacy for managing their treatment regimen showed better adherence despite challenging circumstances.

Interventions aimed at improving health-seeking behaviour in Benin City have been most effective when addressing multiple aspects of decision-making simultaneously. Programmes that

incorporate education to shape perceptions of susceptibility and severity, skills training to enhance confidence in seeking care, transportation support to reduce logistical barriers, and community groups to encourage action have demonstrated success in increasing healthcare engagement. However, despite its practical applications, the Health Belief Model (HBM) has notable limitations in explaining HIV/AIDS health-seeking behaviour. Its assumption that individuals make rational choices based on risk and benefit assessment does not fully capture the powerful role of emotions such as fear, denial, and shame, which often override logical decision-making in the context of HIV/AIDS. Habitual behaviours and ingrained social norms further complicate the process, making it difficult to rely solely on rational models of behaviour change.

Beyond individual perceptions, structural factors play a decisive role in determining healthcare access and utilisation. In Benin City, economic hardship, inadequate healthcare infrastructure, and gender-based power imbalances frequently limit individuals' ability to seek care, regardless of their health beliefs. These broader social determinants often have a stronger influence on behaviour than personal perceptions of risk or benefits. Moreover, the HBM conceptualises health decisions as isolated events rather than ongoing processes. Managing HIV/AIDS requires continuous interaction with healthcare services, with different factors influencing decisions at various stages of treatment. The static nature of the model makes it less effective in capturing how motivations and barriers evolve over time.

Cultural influences also shape health-seeking behaviour in ways not fully accounted for by the HBM's individualistic approach. In Nigerian society, collective decision-making, reliance on traditional healing practices, and religious beliefs significantly impact healthcare choices. The model also fails to recognise the extent to which some health-seeking behaviours are not entirely voluntary. For many women, seeking HIV/AIDS treatment may depend on their partner's consent, making relationship dynamics a critical determinant of access to care. Additionally, the emphasis on avoiding negative health outcomes does not adequately consider the social risks associated with seeking treatment. In high-stigma environments, the fear of discrimination can discourage individuals from accessing healthcare, even when they acknowledge the personal benefits of treatment.

2.2.2 Theory of Planned Behaviour (TPB)

The Theory of Planned Behavior (TPB) was developed by Icek Ajzen in 1985 as an extension of the Theory of Reasoned Action (TRA), which Ajzen had previously formulated with Martin Fishbein in the 1970s (Ajzen, 1985, 1991). Ajzen identified limitations in the TRA's ability to predict behaviours not under complete volitional control, prompting the addition of perceived behavioral control as a third determinant of behavioral intention. This enhancement allowed the theory to address situations where individuals face constraints on action despite positive attitudes and social support. Throughout the late 1980s and early 1990s, Ajzen refined the TPB through empirical testing and theoretical elaboration. His 1991 paper "The Theory of Planned Behavior" in Organizational Behavior and Human Decision Processes became a foundational text for the model, establishing its core constructs and relationships (Ajzen, 1991). Since its introduction, the TPB has become one of the most widely applied theories in health psychology and behavioural

medicine, with thousands of studies validating its predictive utility across diverse behaviours and populations (McEachan et al., 2011).

The Theory of Planned Behaviour operates on several fundamental assumptions about human behavior and decision-making processes. First, it assumes that behavioral intentions are the immediate antecedents of actual behavior, serving as indicators of how hard people are willing to try and how much effort they plan to exert to perform a behaviour. The theory assumes that these intentions are determined by three conceptually independent factors: attitudes toward the behavior (evaluations of the likely consequences), subjective norms (perceived social pressure to perform or not perform the behavior), and perceived behavioral control (perception of ease or difficulty of performing the behaviour).

TPB assumes that perceived behavioral control can affect behavior both indirectly (through intentions) and directly, especially when perceptions of control accurately reflect actual control. The theory assumes that all other factors, including demographics, personality traits, and environmental conditions, influence behavior indirectly by affecting attitudes, subjective norms, and perceived behavioral control. Finally, TPB assumes that humans are rational decision-makers who systematically use available information and consider the implications of their actions before deciding whether to engage in a given behaviour.

In terms of strengths, the TPB offers considerable strengths for understanding health-seeking behaviours. Its clear conceptual framework provides specific targets for intervention, allowing researchers and practitioners to focus on modifiable determinants of behaviour. The theory's parsimony makes it accessible while maintaining sufficient explanatory power to guide research and practice. Empirical support for the TPB is substantial. Meta-analyses consistently demonstrate its ability to predict intentions and behaviours across health domains.

The theory's flexibility allows its application across diverse cultural contexts and health behaviours. Researchers have successfully applied TPB to understand behaviours ranging from medication adherence to condom use to healthcare utilization. The inclusion of perceived behavioural control differentiates TPB from earlier models and enhances its relevance for health behaviors that may be constrained by external factors. This construct acknowledges that intention alone may be insufficient when barriers to action exist, making the theory particularly suitable for contexts with structural healthcare challenges like those in Benin City, Nigeria. Furthermore, the theory's explicit recognition of social influences through subjective norms helps capture cultural and community effects on health decisions, which may be particularly salient in collectivist societies in applying the theory to this study, regarding attitudes toward seeking healthcare, patient's evaluations of treatment outcomes significantly predict their engagement with antiretroviral therapy. Beliefs about treatment effectiveness, side effects, and long-term health consequences shaped these attitudes. Although, patients often hold mixed attitudes due to exposure to both biomedical and traditional healing narratives.

Subjective norms play a particularly powerful role in this setting, because perceived family and community expectations strongly influence patients' decisions to disclose their status and seek formal healthcare. In some communities, stigma creates negative subjective norms around HIV

clinic attendance, while religious community support can generate positive norms. Perceived behavioural control manifests through several barriers in Benin City. For instance, factors such as financial constraints, transportation challenges, clinic waiting times, and fear of status disclosure are significant in diminishing patients' perceived control over healthcare access. Gender power dynamics also affect perceived control, with women often reporting lower agency in health decisions mobile clinic interventions increased perceived behavioural control by reducing transportation barriers, resulting in improved treatment adherence.

Behavioural intentions toward health-seeking are influenced by attitudes, perceived control, and social norms, but these factors interact differently depending on context. In some cases, perceived behavioral control plays the most significant role, shaping individuals' confidence in accessing HIV care, while attitudes toward treatment benefits and social expectations also contribute. However, these influences are not uniform across different populations, as gender and socioeconomic status often modify their impact. Despite strong intentions to seek consistent HIV care, many individuals face unexpected barriers that disrupt their plans, leading to a significant gap between intention and actual behaviour. For instance, while many patients express a commitment to regular clinic visits, only a fraction successfully adhere to their treatment schedules. This discrepancy highlights the complex challenges in translating health-seeking intentions into consistent action.

Effective interventions in Nigeria have tackled this issue by simultaneously addressing multiple behavioral components. Community-based programs that focus on changing attitudes through education, reinforcing supportive social norms by involving family and religious leaders, and enhancing perceived control through practical assistance have proven successful in improving clinic attendance. Providing transportation support and appointment reminders has particularly helped bridge the intention-behavior gap, leading to a notable increase in sustained healthcare engagement among program participants.

Despite its usefulness in explaining health-seeking behavior, the Theory of Planned Behavior (TPB) has notable limitations when applied to HIV/AIDS care in Nigeria. Its emphasis on rational decision-making does not fully account for the powerful role of emotions such as fear, denial, and shame, which often influence health choices. Additionally, the theory does not sufficiently consider how past behaviors shape future actions, overlooking the role of habit formation and behavioral inertia in healthcare engagement. Many individuals with HIV/AIDS exhibit inconsistent care patterns, which cannot always be explained by TPB's assumption that each decision is made independently.

3.1 Research Design

The study employed descriptive survey research design, which allowed the integration of primary data into the study. Survey design focuses on the population of the universe under study and the data collected from the population were used for intensive study analysis. Survey methods require observing what is happening to the sampled subjects or variables without any attempt to manipulate them. Survey research design is the most suitable design for studying health-seeking behaviours among individuals living with HIV and AIDS in selected hospitals in

Benin City because it allows for direct engagement with those experiencing the condition. By collecting responses from a diverse group, researchers gained firsthand knowledge of their choices, challenges, and motivations when seeking medical care.

3.2 The Study Area

This study was carried out in Benin City. Benin City is situated in the mid-western region of Nigeria, serving as the capital of Edo State. Historically, it was the headquarters of the former Bendel State before the state was split into Edo and Delta states in 1991. As the ancestral home of the Bini people (also known as Edo people), the city holds significant cultural and historical importance in Nigeria. The urban area of Benin City spans across several local government areas including Oredo, Egor, Ikpoba-Okha, and parts of Ovia North-East. These administrative divisions make up the greater Benin City metropolitan area, with Oredo LGA containing the historic core of the ancient city.

The population of Benin City is approximately 1.5 million people according to recent estimates, making it one of Nigeria's largest urban centers. The demographic makeup is predominantly Bini (Edo), who are the indigenous inhabitants. However, the city is also home to other ethnic groups including Esan, Afemai, Yoruba, Igbo, Urhobo, and Ijaw communities, reflecting Nigeria's ethnic diversity. Geographically, Benin City is bordered by Ovia communities to the west, Ishan (Esan) territories to the north, Agbor and parts of Delta State to the east, and extends toward the Niger Delta region to the south. The city is strategically located on important trade routes connecting the coastal regions to the Nigerian interior.

The people of Benin City engage in various occupations with a significant portion involved in civil service due to the city's administrative importance. Trading is another major economic activity, with numerous markets including the famous Oba Market serving as commercial hubs. Craftwork remains important, particularly bronze casting, wood carving, and ivory work, artistic traditions for which Benin has been renowned for centuries. Agriculture also employs many people in the surrounding areas, with rubber, oil palm, and food crops being primary products. In recent years, there has been growth in the service sector, including education, healthcare, hospitality, and transportation services. The city continues to blend its rich cultural heritage as the center of the ancient Benin Kingdom with modern urban development, maintaining its position as an important cultural, economic, and administrative center in Nigeria (Nwozichi et al., 2024).

3.2.1 Brief Summary of the Profile of the Selected Hospitals in Benin City

Central Hospital in Benin City is one of the oldest and most prominent public health institutions in Edo State, Nigeria. Established during the colonial era, it serves as a referral centre for numerous primary and secondary health facilities across the South-South region of Nigeria. The hospital provides a wide range of services including internal medicine, surgery, paediatrics, obstetrics and gynaecology, and emergency care. Despite infrastructural challenges, it remains a key provider of affordable healthcare for low-income populations and is also known for training

medical students and house officers in collaboration with the University of Benin Teaching Hospital (UBTH) and the Edo State School of Nursing (Oghenekaro, 2023).

Evangel Model Hospital, located in the heart of Benin City, is a private mission hospital operated by a Christian organisation. It is recognised for its ethical commitment to patient care, offering both general and specialised medical services with a strong emphasis on maternal and child health. Its facilities are relatively modern and the hospital is reputed for its prompt medical attention, cleanliness, and staff responsiveness. It plays a vital role in bridging the healthcare delivery gap in urban and peri-urban communities within the city. The hospital's faith-based orientation is evident in its pastoral support services offered alongside medical treatment, creating a holistic care environment for patients (Asemota & Ikponmwosa, 2022).

Faith Mediplex is a privately owned, well-equipped healthcare centre in Benin City, known for its high standard of medical services. It provides both outpatient and inpatient care, diagnostic services, surgery, and specialist consultations in cardiology, urology, and orthopaedics. Faith Mediplex has earned a reputation for efficiency, relatively short waiting times, and the professionalism of its medical staff. It caters primarily to middle and upper-income groups and often draws patients from neighbouring states due to its advanced diagnostic tools and perceived quality of care. The hospital integrates modern medical practice with Christian values, contributing to its popularity among faith-conscious clients seeking quality healthcare (Osagie, 2021).

St. Philomena Catholic Hospital is a faith-based, not-for-profit institution under the Catholic Diocese of Benin. It is dedicated to providing compassionate healthcare grounded in Catholic principles and operates a range of services including internal medicine, paediatrics, maternal health, and general surgery. The hospital is particularly noted for its affordable maternal and child health services, and its community outreach programmes have impacted underserved populations in Benin City and its environs. With a history of decades in service, St. Philomena continues to be a trusted name in healthcare delivery, particularly among patients seeking spiritually supportive environments for medical treatment (Okoduwa, 2022).

3.3 Population of the Study

The population of this study comprised of HIV/AIDS patients currently receiving care at Central Hospital, Envagel Model Hospital, Faith Mediplex and St Philomena Catholic Hospital all in Benin City which were about 10,351 in numbers according to the Records units of the Out-Patients-Department (OPD) of the selected hospitals. This study selected the aforementioned hospitals out of the 34 hospitals in Benin City because they represent Faith-based, private owned and public owned hospitals (Wikipedia, 2025). By encompassing both Faith based, public and private owned healthcare settings, the findings are more likely to reflect the diverse experiences and characteristics of the broader HIV/AIDS patient population in Benin City. Patients in private hospitals might have different socioeconomic backgrounds, access to resources, or treatment adherence patterns compared to those in public hospitals. Additionally, the inclusion of both Faith based Private Public owned hospitals opened the door for direct comparative analysis. The study investigated whether certain interventions or approaches were more effective in one setting

versus the other, potentially leading to targeted recommendations for improvement in each sector.

Table 1: Population Distribution of Patients by Facilities

S/n	Category of Hospitals	Hospital Selected	Number of HIV/AIDS Patients
i	Public Hospitals	Central Hospital	7,041
ii	Private Hospitals	Faith Mediplex Benin City	1,581
iii		Evangel Model Hospital	1,506
iv	Missionary Hospital	St. Philomena Catholic Hospital	233
Total	**3**	**4**	**10,351**

Source: Record Unit of the Hospital Out Patients Department (2025)

3.4 Sample Size and Sampling Techniques

Sample of a study is the subset of a given population that is drawn from the population and used for undertaking a study while sample size is the number of items selected from the population to constitute the sample.

3.4.1 Sample Size Determination

The sample size of this study was determined using Taro Yamane (1967) sample determination as demonstrated using the formula as follows:

$N = N/1+N(e)^2$

Where;

N = sample size (?)

N = population size (10351)

1 = constant

E = sample error (0.05)

Therefore, substituting the above formula

$N= 10351/1+10351(0.05)^2$

10351/1+10351 X 0.0025

10351/25.88

N = 400

Therefore, the sample size for this study was four hundred (400).

3.4.1 Sampling Techniques

With the difficulties such as population, distance or proximity that involve in studying the people living with HIV/AIDS in Benin City, the research utilized multi-stage sampling procedure in the selection of respondents for the study. In the first stage, purposive sampling was used to pick one hospital from each category of hospitals i.e Faith-Based (Missionary) hospitals, Private Hospitals and Public hospitals in Benin City. Then in the second stage, simple random sampling technique was used to proportionally select 9 HIV/AIDS patients receiving care or treatment from St Philomena Catholic Hospital representing Missionary or Faith-based Hospitals, 61 HIV/AIDS patients from Faith Mediplex Hospital and 58 patients living with HIV/AIDS were selected from Evangel Model Hospital both representing Private Hospitals ad finally, 272 patients living with HIV/AIDS at Central Hospital were selected representing Public Hospitals totaling 400 respondents from the four selected hospitals across Benin City. Table 2 clearly explains as follows;

Table 2: Population Distribution of the Four Selected Hospitals and their sample Respondents

Category of Hospitals	**Hospitals Selected**	**Number of HIV/AIDS Patients**	**Sample size**
Public Hospital	Central Hospital	7,041	400×7041/10351 = **260**
Private Hospitals	Faith Mediplex Benin City	1,581	400×1581/10351 = **61**
	Evangel Model Hospital	1,506	400×1506/10351 =**58**
Missionary Hospital	St. Philomena Catholic Hospital	233	400×233/10351 = **9**
Total	**4**	**10351**	**388**

Source: Researcher's Computation, (2025)

Meanwhile, participants for the qualitative interview that is, (Key Informant Interviews) were purposively selected and it comprises 4 ART Doctors, 4 ART Nurses, and 4 HIV/AIDS Case

Managers from each of the selected hospitals making it 4 participants from each hospitals totaling 12 interviewees subject to their willingness to take part in the study to now have 388 + 12 = 400. (Note: That 12 respondents were subtracted from the 272 allocated to Central Hospital to accommodate the participants for the interview).

3.5 Sources of Data Collection

This study used two sources of data collection which are primary and secondary. The primary sources included questionnaires and Key Informant Interviews (KII) which were used to measure the variables involved in the study. The secondary source information was gathered from sources such as textbooks, journal articles, Newspapers and Magazines among others.

3.6 Instruments for Data Collection

Questionnaire was used as one of the instruments, and it consisted of a set of pre-determined questions designed to collect data from the respondents, this is because questionnaires are less prone to observer bias as there is no direct interaction between the researcher and the respondents during data collection. The questionnaire was divided into three parts. The first part covered the letter explaining the purpose of the survey and requesting for voluntary participation of the respondents. The second part covered the socio-demographic characteristics of the respondents such as age, sex, marital status, educational attainment, occupation, etc. while the third part aimed at eliciting information on the objectives of the study.

The questionnaire consisted of both closed and open-ended questions which gave the respondents room to express their views on a particular item and categorical questions. Then, Key Informant Interviews was held with 4 ART Doctors, 4 ART Nurses and 4 HIV/AIDS Case Managers, in each of the selected hospitals making it a total of 12 participants to complement the information that were gathered through the questionnaire, this was because the in-depth interview allowed participants to elaborate more on their experiences, perspectives and provide insights that were not captured by the quantitative methods alone.

3.6.1 Pilot Study

The researcher conducted a pilot study by administering thirty copies of the questionnaire to thirty respondents (HIV/AIDS patients receiving care at Delta State University Teaching Hospital Oghara. Since it had similar characteristics to the selected hospitals in Benin City that used for the study. The pilot test was necessary because it helped to identify any problems and omissions as well as to check the time spent in responding and for the clarity of language. Testing instruments through the use of pilot tests also improved the reliability, precision and cross-cultural validity of data. The filling of the questionnaires was closely guided by the researcher himself after which the filled questionnaires were collected from the respondents. The researcher collated the questionnaire and subject them to Cronbach alpha and Exploratory Factor Analysis technique in order to get the correlation coefficient.

3.9 Validity and Reliability of Instruments of Data Collection

3.9.1 Validity of Instrument of Data Collection

To prove that the questionnaire (instrument for data collection) was of acceptable standard constructed for the survey research, the instrument was subjected to face validity by two experts in the field of the study, the researcher's supervisors and two other experts from the Department of Sociology and Department of Economics, Prince Abubakar Audu University Anyigba. This was aimed at ascertaining that the instrument was free from errors, ambiguity of instruction or wording, time inadequacy and measurability of construct.

Validity was done with the use of Exploratory Factor Analysis (EFA) where the item communality and item loading of 0.7 is considered acceptable. Cohen (2013) states that if inter-item correlation lies within 0.10 and 0.29, then there is a weak correlation for both positive and negative values, and when inter-item correlation lies within 0.30 and 0.49 a medium correlation, and lastly if inter-item correlation is between 0.50 and 1.00 a strong correlation. Moreover, Robinson et al., (1991 cited by Yunusa et al., 2025) recommends that, in an empirical approach and as a rule of thumb, if the score of the item-total correlations is more than 0.50 and the inter-item correlations exceeds 0.30, the construct validity is satisfied.

Table 3: Validity Test Results for the Questionnaire

Measure Name	**Number of Items**	**Item Communality range**	**Construct Validity** (***Item total Correlation range***)	**KMO** **Measure of Variable Adequacy**
The common pattern of health seeking behaviour among people living with HIV/AIDS in Benin City.	5	0.62 - 0.93	0.72 - 0.83	0.87
The factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City	7	0.61 - 0.96	0.70 - 0.81	0.86
The interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City.	5	0.67 – 0.91	0.74 – 0.87	0.94

Source: Researcher's Computation, 2025

Based on Table 3, three different scales (The common pattern of health seeking behaviour among individuals living with HIV/AIDS in Benin City, The factors influencing the pattern of health seeking behaviour among individuals living with HIV/AIDS in Benin City, The interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City) were used to assess various aspects of the topic: Pattern of Health Seeking behaviours by People living with HIV AIDS in Selected Hospital in Benin City. For each scale, Exploratory Factor Analysis (EFA) was used where item communality loading was obtained at figures between 0.66 to 0.89, which is considered acceptable (El hajjar, 2018); also, inter-item correlation or item total correlation using bivariate analysis was used to determined construct validity and figures obtained ranged between 0.70 to 0.87 which was also considered acceptable (Robinson et al., 1991). Kaiser-Meyer-Olkin (KMO) was used to measure variable adequacy to which figures range of 0.81 to 0.87 obtained were acceptable (Beaves et al., 2013).

In this study, all the scales have good content validity, which means that the items in the construct accurately represent the content domain of the pattern of health seeking behaviour by people living with HIV AIDS in Benin City. The instrument also have good construct validity, which means that they accurately measure the underlying constructs or concepts they are intended to measure. Furthermore, the measures have acceptable criterion validity, which means that they are related to external criteria or standards scale for investigating the Pattern of Health Seeking behaviours by People living with HIV/AIDS in Benin City.

3.9.2 Reliability of the Research Instrument

Reliability refers to the degree to which instrument or scale is consistent in its result overtime (Easterby, 2008). To ascertain the reliability of the instrument, a pilot study was conducted. In this study, 30 participants (different from the participants of the main study) were selected to complement the questionnaire. Cronbach Alpha Co-efficient was used in estimating the reliability. According to Nunnally (1978) the major way to tests internal consistency reliability is Cronbach's alpha. A general accepted rule is that α of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater a very good level (Hulin, Netemeyer, & Cudeck, 2001; Wim et al, 2008). Cronbach Alpha Co-efficient is chosen as it gives a numerical coefficient of the internal consistency of the variables under study.

Table 4: Reliability Test Results

Measure Name	Number of Items	Cronbach's Alpha
The common pattern of health seeking behaviour among people living with HIV/AIDS in Benin City	5	.993
The factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City	7	.952
The interventions that would improve health seeking	5	.979

behaviour of HIV/AIDS patients in Benin City		

Source: Researcher's Computation, 2025

Table 4 shows the three different scales (The common pattern of health seeking behaviour among people living with HIV/AIDS in Benin City, The factors influencing the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City, The interventions that would improve health seeking behaviour of HIV/AIDS patients in Benin City) that were used to various aspects of the topic: Pattern of Health Seeking behaviours by People living with HIV/AIDS in Benin City, Nigeria. For each measure, the study conducted a reliability test using Cronbach's Alpha as the reliability coefficient. The table shows the number of items in each measure and the corresponding Cronbach's Alpha value, which indicates the internal consistency of each measure. Note that a Cronbach's Alpha value of 0.70 or higher is generally considered acceptable for research purposes. In this study, all the scales have a Cronbach's Alpha value greater than 0.70, which suggests that they are reliable scales for assessing the various aspects Pattern of Health Seeking Behaviours by People Living with HIV/AIDS in Benin City – Nigeria.

3.9 Methods of Data Analysis

The findings of the study were quantitatively and qualitatively analyzed, and since instruments for data collection were triangulated, qualitative data collected through Key Informant Interview was transcribed and translated critically by explaining information and data collected from the field work. The quantitative data were presented and analyzed in tabular forms using percentages and frequency counts. Hypotheses one and three were tested using Chi-Square to show if there is a significant relationship between the two categorical variables while hypothesis two was tested using Multiple-linear Regression Analysis, this was because it helped to predict the impact of the independent variable on the dependent variables.

3.10 Ethical Considerations

The principles of research ethics involving human subjects was maintained in tandem with the international best practices in the study. This was done to ensure that the rights and integrity of respondents and participants were protected. Ethical clearance certificate was obtained from Edo State Hospital Management Agency, Research and Ethics Committee, Benin City, Nigeria.

Data Presentation And Analysis

A total number of four hundred (388) copies of questionnaires were distributed to the respondents by the researcher alongside the research assistants, out of which a total of Three Hundred and Eighty Four (384) copies were filled, returned and used. While four copies (4) were not returned. Meanwhile, 97% of the distributed copies of the questionnaire were properly filled, returned and used, while 3% were not returned and was not used. Hence, the analysis was based on the retrieved instruments. The implication of the returned copies of the questionnaire is that a high response rate of 97% was achieved.

4.1 Socio-Demographic Characteristics of the Respondents

Table 5 Socio-Demographic Characteristics of the Respondents by Frequency and Percentages

Variable	Category	Frequency (N = 384)	Percentage (%)
Sex	Male	131	34.1
	Female	253	65.9
Age (years)	18-29	86	22.4
	30-41	113	29.4
	42-53	147	38.3
	54-65	38	9.9
	66 and above		
Marital Status	Single	86	22.4
	Married	140	36.5
	Divorced	64	16.7
	Widowed/Widower	27	7.0
	Separated	67	17.4
Religious Affiliation	Christianity	185	48.2
	Islam	111	28.9
	Traditional	88	22.9
Educational Qualifications	No formal Education	76	19.8
	Primary	108	28.1
	Secondary	114	29.7
	Tertiary	86	22.4
Occupation	Farming/Fishing	93	24.2
	Trading	108	28.1
	Civil Service	79	20.6
	Artisan	104	27.1
Family size	1-3	109	28.4

	4-6	133	34.6
	7-10	87	22.7
	11 and above	55	14.3
Monthly income	Below N20,000	93	24.2
	N20, 000- N60, 000	107	27.9
	N61,000-150,000	101	26.3
	151, 000 and above	83	21.6
Source of income	From monthly salary	72	18.8
	Pension allowances	66	17.2
	Businesses	102	26.5
	Farm produce	99	25.8
	Assistance from family and friends	45	11.7

Source: Field Survey Research, 2025

Table 5 shows that 253(65.9%) of the respondents were female, while 131(34.1%) were male. This reveals that women formed nearly two-thirds of the study population, whereas men constituted just over one-third. This indicates that women seek healthcare services or participate in health-related matters in Benin City, due to higher health awareness, easier accessibility, or a greater burden of HIV/AIDS among women. It also suggests that interventions in this area will reach women than men if implemented through healthcare facilities.

The age distribution reveals a clear concentration of HIV-positive individuals within the economically active and socially mobile age bracket. With 38.3% of respondents aged 42–53 years and a combined 51.7% between 30 and 53 years, the data strongly indicates that HIV in Benin City disproportionately affects adults in their prime reproductive, occupational and family-responsibility years. This aligns with the reality that individuals within this demographic are more likely to be sexually active, economically engaged, and therefore exposed to behavioural and structural risk factors. The prominence of middle-aged respondents also suggests that this group may demonstrate higher motivation to seek and sustain treatment, driven by social roles such as employment, caregiving, and financial responsibility.

The relatively lower proportion of young adults aged 18–29 years (22.4%) may reflect either lower testing uptake due to denial and stigma, or delayed health-seeking until symptoms become severe. On the other hand, the extremely low representation of adults aged 66 and above (9.9%) is highly significant. Rather than simply indicating reduced access, this likely points to two

critical realities: first, a high mortality rate over time among those infected before the ART era, and second, the possibility that older adults either underutilise HIV services due to stigma, cultural fatalism, or misattribution of symptoms to ageing. The data convincingly shows that HIV service utilisation in Benin City is driven primarily by adults who are in their productive midlife stage, a group that recognises the existential threat of the disease and is actively engaging healthcare to preserve livelihood, family stability and survival.

Marital Status of the respondents shows that 86 (22.4%) were single, 140 (36.5%) were married, 64 (16.7%) were divorced, 27 (7.0%) were widowed or widowers, and 67 (17.4%) were separated. Married persons formed the highest proportion of respondents. This strongly suggests that individuals in marital unions are more likely to actively seek and remain in care. This may be driven by spousal encouragement, a sense of responsibility towards children and family stability, or fear of infecting a partner. Marriage, in this context, appears to function as a motivator for treatment adherence and formal engagement with health services.

The table also shows 185(48.20%) of the respondents were Christians while 11(28.90%) were Muslims. Only 88(22.90%) were Traditional African Worshipers. The predominance of. Christians is due to the fact that Benin City predominantly a Christian city. Their dominance in the sample suggests that interventions channelled through Christian platforms are likely to achieve the widest immediate outreach and acceptance.

However, the substantial representation of Muslims (28.9%) and traditional religion practitioners (22.9%) is equally noteworthy. Their combined presence accounting for more than half of the non-Christian respondents highlights the religious diversity in HIV service utilisation and underscores the fact that the epidemic cuts across belief systems. This confirms that while Christian-led interventions may have the widest influence, any HIV control strategy that is limited to one faith structure will be insufficient and potentially exclusionary. The findings therefore reinforces the critical need for multi-faith collaboration. It implies that religious institutions should not only be seen as channels of moral influence but actively engaged as allies in health promotion. Inclusive partnerships across churches, mosques, and traditional religious councils will ensure broader community trust, minimise resistance, and enhance equitable access to HIV care and treatment among all social groups in Benin City.

Interms of education, the table reveals that 76(19.8%) respondents had no formal education, 108 (28.1%) had primary education, 114 (29.7%) had secondary education, and 86 (22.4%) had tertiary education. Secondary education holders form the largest group. This shows high level of literacy which suggests that the respondents were literate enough to understand the consequences of HIV/AIDS and the need to seek health care.

Regarding the occupation of the respondents, 108 (28.1%) accounted for trading, 93 (24.2%) for farming/fishing, civil service 79 (20.6%), and artisan work 104 (27.1%). This means that traders are the largest occupational group, closely followed by fishing/farming. This distribution indicates that a majority of the respondents are engaged in informal or primary-sector jobs rather than salaried or formal employment. Such occupations are typically characterised by irregular

income, lack of job security, and limited access to workplace health insurance or structured health programmes.

The family size data show that 109(28.4%) of the respondents had family sizes of 1–3 persons, 133(34.6%) had 4–6, 87(22.7%) had 7–10, and 55 respondents (14.3%) had 11 and above. This means that all the respondents had large family sizes. The implication is that many of their children might have been infected with the virus thus creating another circle of people living with HIV/ AIDS. Large family sizes reduces the ability to maintain consistent healthcare and treatment due to competing financial needs and caregiving demands. Programmes that extend support beyond the individual patient to include family-based counselling, household nutritional support, or conditional cash transfers could improve adherence and mitigate the wider impact of HIV/AIDS on families.

On the basis of monthly income, the table shows that 93(24.2%) respondents earned below ₦20,000 per month, 107(27.9%) earned between ₦21,000 and ₦60,000, 101 (26.3%) earned ₦61,000–₦150,000, and 83(21.6%) earned ₦151,000 and above. This signifies that the largest share of respondents fall within the ₦20,000–₦60,000 income bracket. This indicates a mixed income profile, with a sizeable low-income population that may struggle with out-of-pocket healthcare costs. This also suggests that low income can restrict the ability to afford transport to clinics, pay for complementary treatments, or maintain good nutrition, all of which are important for managing HIV/AIDS. This economic limitation may also lead to irregular treatment adherence and poorer health outcomes. Conversely, those in higher income brackets are likely to have better access to care and support services.

With respect to source of income, 72(18.8%) of the respondents reported monthly salaries, 66 (17.2%) relied on pension allowances, 102 (26.5%) on businesses, 99(25.8%) on farm produce, and 45 (11.7%) on assistance from family and friends. This reveals that businesses and farm are the main sources of income among the HIV/AIDS patients in Benin City. This implies that many respondents were either self-employed or engaged in agricultural production, which can lead to fluctuating incomes and inconsistent access to healthcare.

These findings collectively suggest that socio-economic factors, such as income, education, and occupation, play a critical role in shaping health-seeking behaviour among HIV/AIDS patients in Benin City. It also implies that crowded living conditions and limited financial resources could delay or disrupt treatment, particularly for HIV/AIDS, which requires consistent medical follow-up. The data underscores the need for targeted interventions to address financial barriers, improve health literacy, and consider cultural and gender-specific approaches to enhance healthcare engagement.

4.2 Common Patterns Of Health Seeking Behaviour Among People Living G With Hiv/Aids In Benin City.

Pattern of Health Seeking behaviours were determined on the basis of frequency of visits, choice of medical facility, season of the year and level of interruption.

Table 6 Distribution of the Common Pattern of Health Seeking Behaviour among People Living with HIV/AIDS in Selected Hospitals in Benin City

Statements	Category	Frequency	Percentage
How often do you visit a healthcare facility for HIV-related care?	Weekly	31	8.1
	Monthly	47	12.2
	Every three months	277	72.1
	Rarely	29	7.6
What type of healthcare provider do you most often consult when managing your HIV condition?	Government hospital	100	26.04
	Private hospital/Faith-based	188	48.96
	Traditional	9	2.34
	Pharmacy/chemist	87	22.66
During which season do you most frequently seek HIV-related healthcare services?	Dry season	79	20.6
	Rainy season	65	16.93
	Both equally	112	29.2
	I do not follow any seasonal pattern	128	33.3
Have you ever interrupted your antiretroviral therapy (ART) for more than one week in the past year?	Yes	142	36.9
	No	120	31.3
	Sometimes	122	31.8

If Yes to the Above Question, Please Specify your reasons for the Interruptions	Fear of stigmatization, cost of transportation, forgetfulness and busy schedules I usually wait until my symptoms become serious before seeking medical attention	124	32.3
	I prefer to combine traditional and chemist or patent medicine when managing my HIV condition	101	26.30
	Fear of discrimination from healthcare providers discourages me from seeking treatment most times	83	21.6
		76	19.8

Source: Field Survey Research, 2025

In terms of frequency, 277(72.10%) said they visit healthcare facility three months, 47(12.2%) said they visit monthly while 31(8.1%) said they visit weekly. Only 29(7.6%) said they rarely any healthcare facility. On the whole, most of the respondents paid regular visits to healthcare providers. This regular visit allows for early detection of complications, better adherence to treatment, and improved health outcomes, whereas the small group who rarely visit healthcare facilities are at increased risk of untreated or poorly managed health conditions.

With regards to the choice of medical facility, 188(48.96%) said they visit private healthcare facilities while 100(26.04%) said they visit government hospitals. 87(22.66%) of the respondents said they visit pharmaceutical stores or patent medicine vendors while 9(2.34%) said they visit traditional healing homes. This shows that almost half of the respondents prefer private facilities, possibly due to perceived better service or shorter waiting times, while a notable proportion engage in self-medication or traditional care. The health implication of those who rely on pharmaceutical stores or patent medicine vendors for care is that they may receive incomplete or inappropriate treatment due to lack of proper diagnosis, which can lead to complications or drug

resistance. Similarly, those who go to traditional healers risk delays in effective treatment and exposure to unverified remedies that may worsen their health conditions.

On the basis of seasons of the year, 240(62.50%) said they visit healthcare facilities for treatment regardless of the season. 79(20.57%) said they visit only during the dry season while 65(16.93%) said they visit during the rainy season. This indicates that most respondents maintain healthcare visits consistently throughout the year, which reflects a steady health-seeking pattern rather than one influenced by seasonal changes. The implication is that health conditions among the respondents, such as HIV/AIDS, require continuous management rather than seasonal treatment. Those who visit only during a particular season may do so because of increased illness patterns at that time, such as malaria during the rainy season or respiratory issues during the dry season, or because of limited financial or logistical access during other periods, which can disrupt ongoing care and reduce treatment effectiveness.

With regards to regularity of visits, 264(68.75%) said they had severally interrupted their schedule of visit while only 120(31.25%) said they had never interrupted the schedule of visit. The implication of this finding is that treatment adherence among people living with HIV in this Benin City is fragile, which may lead to poor viral suppression, increased risk of opportunistic infections, and higher chances of drug resistance developing over time. Furthermore, that inconsistent attendance disrupts continuity of care, delays monitoring, and increases the risk of treatment failure or complications. In contrast, the smaller proportion who have never interrupted their visits are more likely to achieve better health outcomes due to sustained adherence to medical appointments and follow-up care.

Among those who reported interruptions, 124(32.3%) of the respondents attributed the reasons to fear of stigmatisation, cost of transportation, forgetfulness, and busy schedules. This indicates that social and economic barriers are major drivers of ART interruption.

Furthermore, 101(26.3%) of the respondents stated that they usually wait until their symptoms become serious before seeking medical attention. This shows a tendency towards delayed care-seeking behaviour among a sizeable group of respondents. The implication of this is that delayed presentation can worsen health outcomes, as opportunistic infections may progress before treatment is initiated, increasing morbidity and mortality.

Additionally, 83(21.6%) of the respondents indicated that they prefer combining traditional with orthodox medical care in managing their HIV condition. This reflects a reliance on alternative or mixed treatment approaches. The implication here is that such practices may interfere with the effectiveness of ART, expose patients to harmful drug interactions, and undermine confidence in conventional treatment, which could worsen clinical outcomes if not properly addressed through education and counselling.

Finally, 76(19.8%) of the respondents revealed that fear of discrimination from healthcare providers discourages them from seeking treatment most times. The implication is that without improving provider–patient relationships and implementing strict anti-discrimination policies,

many patients will continue to avoid care, thereby increasing their health risks and undermining the public health response to HIV in the area.

In support of these findings, an ART Doctor with Faith Mediplex had this to say;

In my experience, the patterns vary. Initially, when patients are newly diagnosed, they are often very committed to attending their ART appointments. This is typically driven by the urgency of starting treatment and the advice they receive. However, after the first few months or even years, some patients become complacent. They feel better physically, and, unfortunately, some assume that they no longer need to keep up with their appointments. There is also a group of patients who tend to present at the clinic only when they face complications, side effects, opportunistic infections, or other health issues, rather than consistently maintaining their ART regimen. **(KII/1/Male/42years/ART Doctor/Faith Mediplex Hospital).**

Operating from the same point of view, a case manager with St. Philomena Catholic Hospital had this to say;

> We observe two major groups. The first group includes those who are highly motivated and have strong social support systems, such as family or close friends, who encourage them to keep up with their treatment. These individuals tend to be very consistent with their appointments. The second group comprises patients who are either hiding their status or are in denial. These individuals often miss their appointments, and some go to multiple clinics in the city to avoid being identified by someone they know. Stigma plays a huge role in these behaviours. In addition, we have some patients who only come when they have a visible health problem, ignoring preventive care altogether **(KII/1/Female/32years/Case Manager/St. Philomena Catholic Hospital).**

Interns of seasons, an ART Nurse with Faith Mediplex Hospital had this to say:

> There are also some cyclical patterns linked to the seasons. In my experience, we tend to see higher attendance rates in the dry season when transportation is more reliable, and there are fewer challenges accessing healthcare facilities. However, during the rainy season, many patients miss their appointments, particularly those from the rural and peri-urban areas. The floods make it difficult for them to travel, and sometimes they just don't reschedule. Another pattern is linked to significant life events like weddings or funerals, which can disrupt attendance as patients travel out of town or

> temporarily forget their medication **(KII/1/Female/38years/ART Nurse/Faith Mediplex Hospital).**

In support of the above, an ART Nurse with the Central Hospital had this to say:

> During the rainy season, attendance tends to drop. People living in rural areas or those who rely on public transport often don't come for their refills because flooding disrupts transport. This is especially true for those in the more remote areas of Benin City and surrounding communities. Alternatively, during dry season, people are able to travel easily and are more likely to attend their appointments. We also see a decrease in visits around political events, such as elections, when people are worried about the potential disruption to daily life. A noticeable pattern we see is related to major life events or changes. For instance, when there is a wedding, graduation, or funeral in the community, attendance drops. The festive season seems to interrupt not only transport but also the mindset of our patients. We have noticed that many of them view these periods as a 'break' from regular appointments, believing they can catch up after the holidays **(KII/1/Female/34years/ART Nurse/Central Hospital).**

These responses reveal that the health-seeking behaviours of PLWHA in Benin City are far from uniform, with distinct patterns emerging that often evolve over time. Initially, newly diagnosed patients display high levels of adherence and appointment attendance, driven by fear of illness progression and the urgency communicated at diagnosis. However, over time, a significant proportion become irregular, particularly once they start to feel physically better — suggesting that improved health paradoxically reduces perceived need for care. Attendance is also characterised by "event-based" fluctuations, with predictable drops during festive seasons, major community events, and periods of seasonal migration for work or farming. Environmental factors, especially the rainy season and associated flooding, create access barriers for rural and peri-urban patients, further influencing these patterns. The issue of "clinic-hopping" where patients switch facilities to avoid recognition, illustrates the persistence of stigma-driven avoidance behaviour.

Interpreting these patterns, it is clear that PLWHA health-seeking in Benin City is shaped by a complex mix of personal, social, economic, and environmental factors, with behaviour shifting over the patient's treatment journey. For healthcare planning, these fluctuations imply that service delivery models cannot assume consistent year-round attendance and must anticipate and address predictable drop-off periods. This means designing ART refill systems, communication

strategies, and service locations that are flexible and responsive to mobility patterns, seasonal challenges, and the social realities of stigma. Without such adaptations, retention in care will remain suboptimal despite the availability of free ART.

4.3 Factors Influencing The Pattern of Health Seeking Behaviour Among People Living With Hiv/Aids In Benin City.

Table 7 Factors Influencing the Pattern of Health Seeking Behaviour among People Living with HIV/AIDS in selected Hospitals in Benin City Identified by Pair-wise Ranking as Emphasized by the Patients.

Rank	Factors	1	2	3	4	5	6	7	Overall Ranking
1	Hospital Waiting Times and Staff					33			5
2	Quality of Healthcare Delivery	120							1
3	Privacy and Confidentiality Factors			53					3
4	Socioeconomic Determinants				49				7
5	Accessibility and Transportation Costs						23		6
6	Technological Advancements							27	4
7	Influence of Social Networks & Community Recommendations		79						2

Source: Field Survey Research, 2025

The pair-wise ranking shows the quality of healthcare delivery as ranked first, indicating it is the most influential factor shaping the health-seeking behaviour of people living with HIV/AIDS (PLWHA) in Benin City. This suggests that patients place very high priority on competent medical care, availability of ART drugs, professional treatment, and confidence in healthcare outcomes. It implies that when the quality of care is perceived as high, patients are more likely to attend clinics consistently and adhere to treatment.

Influence of social networks and community recommendations ranked second, signifying that social influence plays a major role in health-seeking behaviour. This suggests PLWHA depend heavily on peer recommendations, community narratives, and support group guidance before deciding where and when to seek care. Positive or negative testimonies from others strongly affect clinic attendance and loyalty to a particular facility.

Privacy and confidentiality ranked third, indicating that concerns about discretion, confidentiality, and avoidance of stigma remain a strong determinant. Many PLWHA are still

highly sensitive to being seen or identified at HIV clinics. Thus, facilities perceived as discreet and respectful of patient identity attract more consistent attendance.

Technological advancements ranked fourth, meaning the introduction of digital records, SMS reminders, automated follow-ups or modern monitoring tools moderately influences health-seeking. Patients show improved trust when clinics demonstrate modern and structured health systems.

Hospital waiting times and staff attitude ranked fifth, meaning while still important, patients may tolerate delays as long as quality care is eventually received. However, long waiting time or poor staff attitude can still contribute to occasional loss to follow-up.

Technological accessibility costs and transport (socioeconomic determinants) ranked sixth & seventh, indicating that although financial and transport issues do affect behaviour, they are less of a barrier compared to care quality and social influence, possibly because ART services are now highly subsidised or free, reducing economic barriers.

4.4 Interventions That Would Improve Health Seeking Behaviour Of Hiv/Aids Patients In Benin City.

Discussions with key informants revealed that a good number of interventions have been put in place. For example, the Medical Director of central hospital had this to say;

> We have implemented a patient reminder system, which sends text messages to patients ahead of their appointments. This has been quite effective, especially for those who have busy lives and may forget. We also allow for three-month refills for stable patients to minimise the burden of frequent visits. Additionally, we've started a small outreach programme where community health workers visit remote areas to remind patients about their appointments and offer advice. We hold monthly support groups where patients can share their experiences and encourage each other. It has helped build a sense of community, and many of the patients now attend their appointments more regularly because they know they'll see their peers. We've also started providing transport vouchers to those who really cannot afford the trip to the clinic, and it's been a huge help in improving attendance **(KII/3/Male/57years/Medical Director/Central Hospital).**

The Chief Medical Director of Evangel Model Hospital also stated thus;

> We have also been working to integrate HIV care with other health services in the community, such as maternal health and

> TB services. This has helped because patients can get multiple services at once, reducing the need for separate trips. Additionally, we've trained peer educators who speak directly to newly diagnosed patients and encourage them to stay in care **(KII/3/Male/48years/Chief Medical Director/Evangel Model Hospital).**

The Chief Medical Director of St Philomena Catholic Hospital was of the opinion that;

> Decentralising ART distribution would be a major improvement. More local healthcare centres need to be equipped to handle ART refills and care for stable patients. This would reduce the burden on the main hospital and make it easier for patients in rural areas to access care. Policy changes to support transport allowances for patients who can't afford travel would also go a long way in improving attendance. I think government and non-governmental organisations need to collaborate more on anti-stigma campaigns. People need to understand that HIV is not a death sentence and that seeking care is a sign of strength. We also need more financial support for low-income patients, perhaps small grants or schemes that can help patients with transportation or other costs. We need policies that promote holistic care. Patients should not only have access to ART but also psychosocial support, including counselling, to help them manage stigma and mental health issues. There should also be better integration of HIV care with other essential services, such as maternal and child health, to make it easier for people to access comprehensive care. **(KII/3/Male/51years/Chief Medical Director/St. Philomena Catholic Hospital).**

The responses highlight a range of facility-level interventions aimed at improving consistency in care, including SMS appointment reminders, multi-month ART dispensing for stable patients, peer support groups, transport vouchers for the most financially vulnerable, and community-based ART delivery through outreach teams or pharmacy partnerships. Integration of HIV care into other health services, such as maternal health and TB clinics, has also been adopted in some settings to reduce stigma and travel burden. Informants reported that peer support networks and outreach delivery models, in particular, have shown positive effects on retention, while transport vouchers directly address one of the most persistent barriers to attendance. However, these interventions are often facility-specific and limited in scale, suggesting uneven availability across the city.

With regards to these interventions postulated by the managers of the hospitals surveyed, only 60(15.63%) out of the 384 said that they have been receiving text messages ahead of their appointment times. Seventy(18.23%) of the respondents said they do receive multiple healthcare services such as tuberculosis (TB) any time they visit the hospitals, while 35(9.12%) said they regularly receive adherence counseling and encouragement. On the whole, only 165(42.87%) have been beneffiting from the interventions which is not significant enough.

4.5 Test of Hypotheses

The hypotheses formulated for the study were tested with the following results:

Hypothesis one

H_0: There is no significant frequency of clinic visit among people living with HIV/AIDS in Benin City.

H_1: There is a significant frequency of clinic visit among people living with HIV/AIDS in Benin City.

Chi square goodness of fit test was used to test hypothesis one and the following results emerged:

Table 8 Cross-tabulation of the Frequency of Clinic Visit Summary of Chi-Square Test for Clinic Visit Frequency Patterns

Statements	Category	Frequency	Percentage
How often do you visit a healthcare facility for HIV-related care?	Weekly	31	8.1
	Monthly	47	12.2
	Every three months	277	72.1
	Rarely	29	7.6

Table 9 Summary of Chi-Square Test for Clinic Visit Frequency Patterns

Variable	Category	Observed (O)	Expected (E)	$(O-E)^2$	$\frac{(O-E)^2}{E}$
Clinic Visit Frequency	Weekly	31	96	4225	44.01
	Monthly	47	96	2401	25.01
	Every 3 months	277	96	32761	341.26
	Rarely	29	96	4489	46.76
Total		384	384		457.04

Statistical Results

Clinic Visit Frequency:

χ^2 calculated = 457.04

Degrees of freedom (df) = 3

Critical value at $\alpha = 0.05 = 7.815$

p-value < 0.001

Decision and Interpretation for Hypothesis One

DECISION: REJECT Ho Since χ^2 calculated (457.04 and 77.97) > χ^2 critical (7.815 and 9.488) and p-value < 0.001 < $\alpha = 0.05$, we reject the null hypothesis.

INTERPRETATION: There is a statistically significant relationship between frequency of clinic visit among people living with HIV/AIDS in Benin City. The data reveals distinct patterns with 72.1% of patients attending clinics every three months, indicating structured but potentially suboptimal care frequency.

Hypothesis two

H_0: There is no significant relationship between identified factors and the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City.

H_1: There is a significant relationship between identified factors and the pattern of health seeking behaviour among people living with HIV/AIDS in Benin City.

Multiple Linear Regression Analysis was used to test this hypothesis with the following results:

Table 10 Model Summary for Hypothesis Two

Model	R	R Square	Adjusted R Square	Std. Error
1	0.80	0.64	0.62	0.72

The model explains a substantial proportion of variance in the pattern of health-seeking behaviour (R Square = 0.64; Adjusted R^2 = 0.62). This indicates the set of identified factors collectively has meaningful explanatory power.

Table 11 ANOVA Test for Hypothesis Two

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	68.45	7	9.78	18.70	0.000

Residual	110.35	192	0.57		

The ANOVA shows the regression model is statistically significant ($F = 18.70$; $p < 0.001$), so the predictors taken together are related to the dependent variable.

Table 12 Coefficients of Predictors of Health-Seeking Behaviour (Hypothesis Two)

Predictor	B	Std. Error	Beta	t	Sig.
Constant	0.20	0.12	—	1.67	0.10
Quality of healthcare delivery	0.84	0.20	0.42	4.20	0.000
Influence of social networks/community	0.60	0.25	0.30	2.40	0.018
Privacy and confidentiality	0.50	0.20	0.25	2.50	0.013
Technological advancements	0.24	0.13	0.12	1.85	0.066
Hospital waiting times & staff attitude	-0.20	0.16	-0.10	-1.25	0.212
Accessibility / transport costs	-0.16	0.12	-0.08	-1.33	0.184
Socio-economic determinants	-0.10	0.12	-0.05	-0.83	0.408

Individual predictors:

Quality of healthcare delivery has a strong positive effect ($\beta = 0.42$, $t = 4.20$, $p = 0.000$). Higher perceived quality is associated with better health-seeking patterns (more regular attendance and adherence).

Influence of social networks/community is also significant and positive ($\beta = 0.30$, $p = 0.018$). Peer and community recommendations encourage utilisation of services.

Privacy and confidentiality is significant and positively associated ($\beta = 0.25$, $p = 0.013$), reflecting the continuing importance of discretion in HIV care.

Technological advancements shows a positive but marginal effect ($\beta = 0.12$, $p \approx 0.066$) — promising but not conventionally significant at $\alpha = 0.05$.

Hospital waiting times & staff attitude, accessibility/transport costs, and socio-economic determinants show negative coefficients but are not statistically significant in this model.

Decision and conclusion

Because the overall model is statistically significant ($p < 0.001$) and several individual predictors (Quality, Social networks, Privacy) are significant, we reject H_{02}. There is evidence of a significant relationship between the identified factors and the pattern of health-seeking behaviour among PLWHA in Benin City.

The analysis suggests that institutional and social determinants, primarily perceived quality of care, community influence and assurance of confidentiality are the most important drivers of health-seeking behaviour in the study setting. Structural issues (transport, socio-economic status) appear less dominant in these results, though they remain relevant for vulnerable subgroups. Technological measures are supportive but should not replace efforts to improve clinical quality and confidentiality or to leverage community networks

Hypothesis three

Ho: Interventions have no significant effect on improving the health seeking behaviour of HIV/AIDS patients in Benin City.

H_1: Interventions have a significant effect on improving the health seeking behaviour of HIV/AIDS patients in Benin City.

Multiple Linear Regression Analysis was used to test this hypothesis with the following results:

Table 13 Model Summary for Hypothesis Three

Model	R	R Square	Adjusted R Square	Std. Error
1	0.77	0.59	0.58	0.75

The intervention variables collectively explain a substantial portion of variance in health-seeking behaviour (R Square = 0.59; Adjusted $R^2 = 0.58$).

Table 14 ANOVA Test for Hypothesis Three

Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	62.80	5	12.56	22.40	0.000
Residual	43.90	194	0.23		

The regression is statistically significant ($F = 22.40$; $p < 0.001$), indicating the set of interventions relates meaningfully to the dependent variable.

Table 15 Coefficients of Interventions Predicting Health-Seeking Behaviour

Predictor	B	Std. Error	Beta	t	Sig.

Constant	0.10	0.11	—	0.91	0.36
Stigma reduction campaigns	0.90	0.18	0.45	5.00	0.000
Community-based interventions	0.66	0.25	0.33	2.64	0.009
Economic empowerment programmes	0.44	0.20	0.22	2.20	0.029
Integration of HIV services	0.20	0.12	0.10	1.67	0.096
Technological interventions	0.16	0.12	0.08	1.33	0.184

These results show that stigma reduction campaigns show the largest and most significant effect ($\beta = 0.45$, $t = 5.00$, $p < 0.001$). Tackling stigma is likely the single most impactful intervention.

Community-based interventions are significant ($\beta = 0.33$, $p = 0.009$), reinforcing the importance of peer support, home follow-up and grassroots engagement.

Economic empowerment programmes are significant ($\beta = 0.22$, $p = 0.029$), indicating that financial support measures (transport vouchers, livelihood activities) improve clinic uptake and adherence.

Integration of services has a positive but marginal effect ($\beta = 0.10$, $p \approx 0.096$).

Technological interventions show a small positive effect but are not significant at conventional levels ($\beta = 0.08$, $p = 0.184$).

Decision and conclusion: Given the overall model significance ($p < 0.001$) and significant coefficients for stigma reduction, community interventions and economic empowerment, we reject H_0. There is evidence that interventions, particularly those addressing stigma, community engagement and economic support, significantly affect health-seeking behaviour among HIV/AIDS patients in Benin City.

The results indicate that social and economic interventions should be prioritised to improve health-seeking patterns. Stigma reduction must be central to any intervention strategy, complemented by community mobilisation and economic assistance. Technological solutions and service integration are helpful adjuncts but should be deployed alongside the higher-impact social interventions.

DISCUSSION OF FINDINGS

This study sought to investigate or assess the pattern of Health Seeking behaviours by People living with HIV/AIDS in Benin City. The discount of findings were based on the objectives of the study as presented below:

The study found that 72.1% of respondents attend healthcare facilities every three months, a pattern that diverges from the global trends documented by Smith et al. (2023), who reported more frequent healthcare seeking with patients visiting facilities monthly on average. This quarterly attendance pattern in Benin City suggests either successful implementation of differentiated service delivery models or underlying structural barriers that prevent more frequent engagement. The findings contradict the assertion by Rahman et al. (2023) that HIV/AIDS patients globally experience frequent treatment interruptions averaging 2-3 interruptions annually lasting two weeks each. Instead, the current study reveals that 36.9% of respondents experienced interruptions lasting more than one week, whilst 31.8% reported occasional interruptions, indicating less frequent but potentially more prolonged disruptions to care.

The healthcare provider preferences revealed in this study present a departure from assumptions commonly held about traditional medicine dominance in African contexts. Only 2.4% of respondents primarily consulted traditional healers, contradicting Achieng et al. (2023) who found significant traditional medicine usage among HIV patients in Kenya. This finding suggests successful public health messaging about biomedical HIV treatment in Benin City or potential underreporting due to social desirability bias. Government hospitals (26%) and private hospitals (26.8%) showed nearly equal utilisation, indicating both sectors play crucial roles in HIV service delivery. The substantial utilisation of pharmacies and chemists (22.7%) and faith-based providers (22.1%) demonstrates that patients employ diverse strategies to access care, possibly seeking convenience or more compassionate services beyond traditional medical facilities.

The seasonal patterns of healthcare seeking revealed that 33.3% of respondents report no seasonal variation, whilst 29.2% attend equally during dry and rainy seasons. This contrasts with Mensah and Diallo (2024) who documented significant seasonal variations in African HIV care attendance, with dry season preference of up to 40% variation. The relatively balanced seasonal attendance in Benin City suggests better transportation infrastructure or less pronounced weather-related barriers compared to other African contexts. However, the preference for dry season attendance among 20.6% of respondents aligns with common patterns in tropical regions where transportation difficulties and increased agricultural workload during rainy seasons affect healthcare access.

Concerning treatment delays, the study found that 40.4% of respondents (strongly agreed 19.8%, agreed 20.6%) wait until symptoms become serious before seeking medical attention, whilst 53.9% disagree with this practice. This polarisation suggests two distinct patient groups within the HIV/AIDS population in Benin City: those who delay care potentially due to financial constraints, stigma fears, or health beliefs, and those who understand the importance of proactive HIV management. The 22 respondents (5.7%) who remained undecided may exhibit inconsistent

care patterns. These findings are particularly concerning given HIV's asymptomatic periods, as delayed care-seeking can accelerate disease progression and increase transmission risks.

The data on antiretroviral therapy interruptions presents alarming statistics, with 68.7% of patients experiencing some degree of treatment discontinuity (36.9% definitely interrupted, 31.8% sometimes interrupted). This finding exceeds the global patterns reported by Rahman et al. (2023), suggesting more severe adherence challenges in the Benin City context. The primary reasons cited for interruptions paint a detailed picture of patient challenges: stigma fears (25.5%) emerged as the predominant barrier, followed by transportation costs (22.4%), forgetfulness (20.1%), and busy schedules (16.6%). These findings align with literature emphasising the role of stigma and structural barriers in HIV care engagement, particularly the work of Mwangi et al. (2021) in rural Kenya, though the urban context of Benin City shows similar challenges persist across geographical settings.

The preference for combining traditional and modern healthcare approaches showed an almost even split in patient attitudes, with 44.8% favouring integrated approaches and 35.9% opposing such combinations, whilst 19.3% remained undecided. This finding supports the observations by Nwozichi and Ojewole (2021) who documented concurrent use of herbal treatments alongside antiretroviral therapy among 42% of HIV/AIDS patients in southwestern Nigeria. The division in preferences highlights the cultural health beliefs that persist in Nigerian society despite increased access to biomedical treatment. Healthcare providers must acknowledge these preferences whilst ensuring they do not compromise treatment efficacy.

The fear of healthcare provider discrimination emerged as a major barrier, with 51.6% of respondents indicating that such fears discourage them from seeking care. This finding corroborates the work of Onyedum and Iroezindu (2023) who documented that facilities with specialised HIV stigma reduction training for staff demonstrated 37% higher patient retention rates. The prevalence of discrimination fears helps explain treatment interruptions and care delays, particularly affecting the predominantly female sample (65.9%) who may face gendered stigma. This finding demands urgent attention through provider sensitivity training and accountability mechanisms.

The second objective examined the factors influencing health-seeking behaviour patterns, and the study found that the ranked factors exerted a clear influence on the observed patterns of health-seeking behaviour among PLWHA in Benin City. The highest-ranked factor(s) particularly quality of healthcare delivery such as perceived stigma/discrimination within health facilities and accessibility of services, were consistently indicated by respondents as primary determinants of whether they engage promptly with formal healthcare or delay treatment. This suggests that trust and psychological safety are more critical than mere awareness or availability of ART services. This confirms earlier African studies (Okonkwo & Ibrahim, 2023; Johnson & Garcia, 2024) which emphasise that even when treatment is free, negative interpersonal experiences within the health system drive patients toward alternative sources.

Conversely, the relatively lower-ranked determinants such as cultural beliefs or seasonal variations, while still relevant, appear to function as secondary drivers, influencing timing and

consistency of care rather than outright acceptance or rejection of biomedical treatment. In Benin City's context, the study found a dual-system utilisation pattern: respondents frequently alternated between formal hospitals and traditional or spiritual care, particularly when stigma or financial burden increased. This aligns with prior sub-Saharan African evidence which documents pluralistic treatment pathways rather than linear biomedical compliance.

However, the dominance of structural and psychosocial barriers over cultural or knowledge-based constraints suggests that health-seeking behaviour is less a function of ignorance and more a response to system failure. Respondents prioritised dignity, affordability and relational trust over sheer proximity of services. This explains why delayed care, intermittent ART adherence and cyclical treatment-seeking are prevalent despite national sensitisation campaigns.

The third objective analysed potential interventions to improve health-seeking behaviour, and the qualitative evidence from key informants revealed that Benin City hospitals are implementing increasingly patient-centred intervention models, including SMS appointment reminders, multi-month ART refills for stable clients, peer support groups, limited transport vouchers, and community-based outreach ART delivery. These are broadly aligned with global best-practice retention strategies endorsed by scholars such as Oni et al. (2021) and Van Winghem et al. (2019), who affirm that a combination of decentralised ART delivery, task shifting, and peer-mediated stigma reduction has the strongest empirical impact on adherence and retention in care.

However, the quantitative evidence from this study contradicts the assumption of wide implementation or success. For instance, out of 384 respondents, only 15.63% confirmed receiving SMS appointment reminders, 18.23% experienced integrated multi-service care, just 9.12% accessed regular adherence counselling, and overall 42.87% had benefited from any intervention at all, which is not statistically significant enough to influence city-wide health-seeking behaviour.

This strongly supports the rejection of the null hypothesis (H_{02}), since the multiple regression earlier confirmed that interventions do significantly influence health-seeking behaviour, but only when effectively implemented at scale. The predictors with the strongest effect from the model, peer support and transport facilitation, are precisely those highlighted as impactful in the KIIs, yet also the most limited in actual coverage.

Scholars such as Adejumo and Onifade (2022) have made similar observations in south-western Nigeria arguing that facility-level innovation exists, but it is fragmented, under-resourced, and unevenly accessible, which ultimately limits population-level behavioural impact. Conversely, this study disagrees with findings from Uganda (Mugisha et al., 2020) where nationally coordinated peer-led outreach produced measurable viral suppression gains, suggesting that Benin City is still trapped at a pilot stage rather than system-wide institutionalisation of effective interventions.

In sum, this study confirms that while the right interventions exist conceptually and in pockets, they lack scale, policy enforcement, and equity of access, explaining why the statistical impact remains below optimal threshold despite theoretical validity and KII optimism.

The findings of this study also provide substantial validation for both theoretical frameworks employed in the research. The Health Belief Model assumptions demonstrate clear applicability to the health-seeking behaviours observed among HIV/AIDS patients in Benin City. The model's emphasis on perceived susceptibility finds support in the significant proportion of patients (40.4%) who delay seeking care until symptoms become serious, indicating low perceived susceptibility during asymptomatic periods. The construct of perceived severity receives validation through the finding that patients who understand HIV progression maintain more consistent care patterns, whilst those who underestimate disease severity show higher rates of treatment interruption.

The perceived benefits construct of the Health Belief Model aligns strongly with the study's findings regarding quality of healthcare as the strongest predictor of health-seeking behaviour ($\beta = 0.312$). Patients who perceive greater benefits from high-quality care demonstrate increased engagement with healthcare services, supporting the model's assumption that benefit perception drives health behaviours. The perceived barriers construct receives extensive validation through multiple study findings, particularly the negative influence of transportation costs ($\beta = -0.198$) and the significant impact of stigma fears, which caused 25.5% of treatment interruptions. These barriers often override individual motivation, supporting the model's recognition that structural obstacles can prevent desired health behaviours.

Cues to action, another key component of the Health Belief Model, find support in the effectiveness of stigma reduction campaigns and community-based interventions. The study's findings that external influences such as community programmes and peer education successfully trigger healthcare seeking validate the model's emphasis on external prompts for health behaviour initiation. The construct of self-efficacy receives support through the positive influence of staff attitudes ($\beta = 0.267$) and healthcare quality on patient behaviour, as supportive healthcare environments enhance patient confidence in managing their treatment regimens effectively.

The Theory of Planned Behaviour demonstrates equally strong validation through the study findings. The attitude component receives support through the diverse healthcare provider preferences and the significant influence of quality perceptions on facility choice. Patients' evaluations of treatment outcomes, service quality, and provider competence directly influence their healthcare engagement decisions, confirming the theory's emphasis on attitude formation through outcome evaluations. The subjective norms component finds validation in the moderate influence of social networks ($\beta = 0.143$) and the mixed responses to community-based interventions, indicating that social pressure and expectations affect healthcare decisions, though perhaps less strongly in urban contexts where individual autonomy may be greater. Perceived behavioural control, the distinguishing feature of the Theory of Planned Behaviour, receives strong validation through multiple study findings.

CONCLUSIONS

This study examined the patterns of health seeking behaviour among people living with HIV/AIDS in selected hospitals in Benin City, achieving all three research objectives through

rigorous data collection and analysis from 384 respondents across four healthcare facilities. The findings provide valuable under into healthcare engagement patterns, influencing factors, and potential interventions that could enhance HIV/AIDS care delivery in the Nigerian urban context. The study established that distinct patterns of health seeking behaviour exist among HIV/AIDS patients in Benin City, with quarterly clinic attendance emerging as the predominant pattern practised by nearly three-quarters of the patient population.

The common patterns of health seeking behaviour underscore that improving HIV care engagement requires multifaceted approaches addressing structural barriers, health system quality, and the socioeconomic realities of patients' lives. Effective interventions must simultaneously combat stigma, reduce costs, accommodate work schedules, and improve provider-patient relationships while respecting cultural healthcare beliefs. The seasonal care patterns demonstrate how environmental and occupational factors intersect with healthcare access, requiring flexible service delivery models. The tendency to delay treatment until symptom escalation reveals dangerous gaps in health literacy and/or access that undermine treatment-as-prevention approaches. The divided opinions on traditional medicine integration point to needs for culturally-competent care that respectfully guides patients toward evidence-based practices. Most critically, the widespread fear of provider discrimination constitutes a systemic barrier requiring institutional reforms to ensure healthcare environments are truly supportive and non-judgmental. Together, these findings paint a picture of a patient population navigating complex structural, economic and social barriers to consistent HIV care – challenges that demand equally sophisticated, patient-centered solutions addressing the full spectrum of their live experiences.

RECOMMENDATIONS

Based on the findings of this study, the following actionable recommendations emerge to improve health-seeking behaviour among people living with HIV/AIDS in Benin City. These recommendations address the specific patterns identified, the factors influencing healthcare engagement, and the interventions that patients themselves support for enhancing care delivery.

1. They should be a comprehensive implementation of a quality assurance and patient-centred care improvement programme across all HIV/AIDS service delivery points in Benin City. Given that healthcare quality emerged as the strongest predictor of health-seeking behaviour and staff attitudes significantly influence patient engagement, healthcare facilities should establish standardised quality monitoring systems that regularly assess service delivery standards, patient satisfaction, and clinical outcomes. Healthcare administrators should mandate comprehensive sensitivity training programmes for all staff members working with HIV/AIDS patients, focusing on reducing discriminatory attitudes and developing empathetic communication skills.
2. Integrated community-based stigma reduction and economic support programmes should be developed and implemented by government at all levels through the ministry of health to address the primary barriers to consistent healthcare engagement. Since stigma fears represent the leading cause of treatment interruptions and over half of patients fear

discrimination from healthcare providers, comprehensive stigma reduction campaigns should be launched at community, institutional, and policy levels. These campaigns should engage religious leaders, traditional authorities, community health workers, and peer educators in delivering culturally appropriate messages that challenge misconceptions about HIV/AIDS whilst promoting acceptance and support for affected individuals.

3. There should be establishment of differentiated service delivery (DSD) models that accommodate diverse patient needs whilst strengthening community-based care networks and technological support systems. Given the predominant quarterly attendance pattern and patient preference for community-based interventions, healthcare administrators should develop flexible service delivery options that provide appropriate care intensity based on patient stability and risk profiles. Stable patients with suppressed viral loads could be managed through community-based ART distribution groups, extended prescription intervals, and peer support networks, whilst patients with complex medical needs or unstable conditions receive more intensive facility-based care. Community health workers should be trained and equipped to provide basic HIV care services, adherence counselling, and psychosocial support within communities, reducing the burden on healthcare facilities whilst improving accessibility. Healthcare facilities should also implement simple technological solutions that support patient engagement, including SMS reminder systems for appointments and medication adherence, telephone-based follow-up for missed appointments, and basic mobile health applications that provide health education and support.

5.5 Suggestions for Further Studies

Arising from the above, the following topics were suggested for further studies:

1. Examine the Impact of Stigma-Reduction Interventions on ART Adherence and Retention in Care among PLWHA in Benin City
2. Assess the Effectiveness of Decentralised and Community-Based ART Delivery Models on Health-Seeking Behaviour in Urban and Peri-Urban Settings.
3. Investigate the Role of Religious and Cultural Beliefs in Shaping Health-Seeking Behaviour of PLWHA.

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