

Segregated healthcare impact on patients living with HIV in a clinic in Botswana

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Background: Despite Botswana's progress in achieving the 95–95–95 goals, some health systems continue to provide segregated services for people living with HIV through Infectious Disease Care Centres (IDCCs) located within public health facilities. This may lead to stigma arising from unintended disclosure of an HIV status and cause a detrimental impact on patient health-seeking behaviour.

Objectives: This study explores the impact of segregation on patients living with HIV and the perception with which they view it, specifically: voluntary testing, disclosure of HIV status, treatment initiation, and continuation of treatment.

Method: Fourteen in-depth interviews supplemented with field notes were conducted using the phenomenological approach. Data were analysed by the researcher and co-authors using manual coding and the Atlas Ti version 8 software.

Results: Seven themes were derived from the data and included service provision, stigma and discrimination, disclosure of HIV status, treatment initiation and adherence, psychological impact and ethical considerations, barriers to service provision, and positive impact of IDCC-based care.

Conclusion: Patients experienced both challenges and benefits with segregated care. Integrated HIV and general medical services leveraging on positive aspects of IDCC care and counselling for patients is recommended, alongside capacitating healthcare workers with communication skills.

Keywords: barriers to HIV care; impact of IDCC care; patient perceptions in HIV care; stigma and discrimination in HIV care.

What this study adds: This study highlights how segregated HIV care impacts treatment adherence positively and negatively and exacerbates stigma. Findings provide evidence to guide Botswana's move toward integrated HIV and primary healthcare services.

Introduction

The global burden of HIV

In 2022, approximately 39 million individuals worldwide were living with HIV, with sub-Saharan Africa (SSA) representing two-thirds of the overall burden. As of 2024, HIV had affected 40.8 million individuals, including 39.4 million adults aged 15 years and older, and 1.1 to 1.8 million children aged 0 to 14 years. Women and girls constituted 53% of individuals living with HIV and represented 63% of all new infections worldwide in 2024.¹

In 2024 only 87% (range: 69% – 98%) of individuals with HIV were cognisant of their status, resulting in approximately 5.3 million individuals remaining unaware of their HIV-positive condition.¹ The prevalence of HIV is disproportionately elevated among key populations, including gay men and other men who have sex with men (7.6%), sex workers (2.7%), individuals who inject drugs (7.1%), transgender individuals (8.5%), and incarcerated populations (1.4%).¹

Advancements in treatment and changing health needs

By the end of 2024, 31.6 million people were receiving antiretroviral therapy (ART), a significant increase from 7.7 million in 2010, though short of the 34 million target for 2025.^{1,2} Antiretroviral therapy has transformed HIV into a manageable chronic illness, enhancing life expectancy.

However, the risk of non-communicable diseases (NCDs) increases with age for individuals living with HIV, underscoring the necessity of integrated care models.²

Integration of HIV and other health services

Data from Uganda indicate that the integration of HIV and NCD care may reduce stigma and enhance patient-provider relationships.³ Systematic reviews indicate that integration improves HIV testing uptake, ART initiation, retention in care, and viral suppression.⁴ However, in Tanzania, healthcare providers cited staff shortages, spatial constraints, and inadequate integration as persistent barriers.⁵

Stigma in HIV care

Stigma remains a global challenge. A nationwide study in Sweden revealed that the fear of disclosure was the primary concern for individuals living with HIV.⁶ In SSA, discriminatory attitudes were strongly linked to lower HIV testing uptake.⁷ A systematic review further confirmed stigma's association with depression, poverty, gender inequality, and non-disclosure.⁸ In Haiti, patients reported that the segregation of HIV services undermined privacy and fairness.⁹

The context of Botswana

Botswana continues to experience a high HIV burden, with an estimated 350 000 individuals living with HIV in 2023.¹⁰ The country has achieved high ART coverage and made progress towards the Joint United Nations Programme on HIV/AIDS (UNAIDS) 95–95–95 targets.¹⁰ Only until recently, the health system was largely dependent on segregated Infectious Disease Care Clinics (IDCCs), which operate separately from general outpatient services such as diabetes, hypertension, and sexual reproductive health. While this model enabled rapid ART scale-up, it has also perpetuated fragmented care, stigma, and inefficiencies, raising concerns about sustainability.^{2,11,12}

Study rationale

International evidence highlights that integrated HIV services with primary care and NCD services improve continuity of care, reduce stigma, and strengthen health systems.^{12,13} Experiences from Kenya, Uganda, and Rwanda further demonstrate the benefits of integrated models.^{2,10} In Botswana, where IDCCs remain central to ART delivery, it is vital to explore the lived experiences of patients within segregated care systems. This study therefore investigates stigma, disclosure, treatment initiation, and adherence among patients, while assessing opportunities for greater integration of HIV services.

Research methods and design

Study design

This study used descriptive phenomenology to explore participants' experiences with segregated HIV care,

capturing the challenges they face amid HIV stigma and discrimination. The study design was qualitative and cross-sectional. We applied descriptive phenomenology to explore participants' lived experiences.

Study setting

The study took place at a public clinic in Tati Siding Village, Botswana, serving 17 000 people, with 1367 living with HIV. The clinic offers HIV care, maternity, chronic disease management, and family planning, staffed by one nurse, one healthcare assistant, and two medical staff, with rotating doctors because of shortages. According to the IDCC clinic manager and matron, patients receive HIV counselling, testing, and treatment initiation separately at the IDCC within the clinic, with additional counselling, medication, and screening for opportunistic infections. IDCC is a vertical unit within the clinic that offers HIV testing and treatment. The majority of clinics in Botswana offer dedicated services for HIV patients so they don't queue in general consultation queues.

Inclusion criteria

The study enrolled mentally competent Botswana citizens aged 18 years and older, living with HIV, and receiving care for 3 years or more at the IDCC in Tati Siding clinic. Mental competency was assessed during the informed consent process. Participants were considered eligible if they demonstrated an understanding of the study objectives and procedures, were able to communicate their decision to participate, and were not identified as having psychiatric or cognitive impairments by either clinic staff or the interviewer.

Data collection and analysis

This study used interviews, observations, and field notes to gather data on patient experiences and perceptions. Fourteen in-person interviews were conducted in a quiet, private room provided within the clinic under study; audiotaped, transcribed, and translated to English (for those in Setswana). A pilot test with four patients ensured the interview guide's effectiveness. Participants were recruited through purposive sampling. The nurse prescriber facilitated recruitment of participants likely to give information-rich interviews. Data saturation was reached at 12 interviews and confirmed by two additional interviews. Data were analysed using manual coding and the Atlas Ti version 8 software (ATLAS.ti, Berlin, Germany).

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of Botswana, Ministry of Health and Wellness (reference number: HPDME-13/18/1). The study involved human participants and was conducted in compliance with ethical guidelines for human subjects research, with approval by the Institutional Review Board at the University of Botswana with study approval number

URB/IRB/GRAD/107. Patients' identities were anonymised with letter and number labels, and written or verbal consent was obtained. Transcripts were stored on a password-protected computer.

Results

Analysis of 14 in-depth interviews revealed seven interlinked themes (Table 1) that capture participants' experiences of segregated HIV care: (1) perceptions of service provision, (2) stigma and discrimination, (3) disclosure of HIV status, (4) impact of segregation on treatment initiation and adherence, (5) ethical considerations and psychological impact, (6) positive impact of IDCC, and (7) barriers to

service delivery. The themes are presented below with thick description and illustrative quotations (2–3 per theme).

Theme 1: Perceptions of service provision

Participants identified a wide range of services received at the IDCC, including consultations, ART initiation, refills, laboratory monitoring, psychological counselling, and health education. For many, these services were highly valued, particularly the openness of staff and opportunities for health education:

'Even when we come here, we get assistance okay. Even when I don't understand ... I am able to ask questions that I have, and they welcome me and give me direction about everything.' (Participant 14, P2124, 43 years old, male)

TABLE 1: Themes derived from the data.

Theme	Category	Sub-category
Perceptions of service provision	Education	HIV-related health education
	Consultation	Physician
	HIV-related services and other diseases	Consultations
	ART initiation, refills, and review for medication side effects	HIV services, outpatient
	Laboratory monitoring	Inpatient services, maternity wing
	Screening, detection and prevention of other diseases	ART assistance
	Psychological support	Phlebotomy
Stigma and discrimination	Institutional stigma and discrimination	Early detection of other diseases and prevention of opportunistic infections
	Internalised self-stigma	General counselling and adherence counselling
	Community perceptions contributing to stigma and discrimination	Segregation facilitates stigma and discrimination
Disclosure of HIV status	Types of disclosure	Internalised self-stigma
	Duration to disclose	Initial perceptions contributing to stigma and discrimination
	Reasons for disclosure	Voluntary disclosure
	Reasons against disclosure	Involuntary disclosure
		Immediate to prolonged duration to disclose
		To protect others
		Fear of the impact of disclosure on relationships
		Negative impact of disclosure on employment
		Need to have a sense of privacy
		Community stigma
	Psychological impact of disclosure	Emotions associated with disclosure
Impact of segregation on treatment initiation and adherence	Initiation of HAART	Segregation is a barrier to initiation
	Continuation of treatment	Segregation may facilitate defaulting of ART
Ethical considerations and psychological impact	Loss of right to privacy	Privacy issues
	Loss of right to confidentiality	Confidentiality issues
	Loss of dignity	Patient violation
	Negative psychological impact	Fear to disclose
		Isolation
		Guilt
		Shame
		Confusion
		Low mood
Positive impact of IDCC	Positive psychological impact	Counselling facilitating self-acceptance
	Good adherence secondary to treatment adherence counselling	HIV treatment education facilitating adherence
	Improved health status	Physical health is improving
		ART prolonging life
	Empowerment through education	Decision-making empowered through education
	Early prevention and treatment of opportunistic diseases	Early screening and diagnosis of diseases
	Psychosocial support	Psychological support
Barriers to service delivery	Overcrowding	Concerned about overcrowding
	Long IDCC queues	Long queues
	Restricted access to other facilities to access HIV-related services	Restricted ART access in other facilities
	Segregated services within the facility	
	Restriction on medications	Reduced frequency of visits and convenience

ART, antiretroviral therapy; HAART, highly active antiretroviral therapy; IDCC, Infectious Disease Care Centre.

'They have served me well. Oh, I just come happily without a problem ... I love Tati Siding because their processes run very smoothly.' (Participant 10, P1624, 43 years old, female)

At the same time, others raised concerns about service quality. Some felt they had less access to doctors compared to other facilities, and a few perceived health talks as stigmatising:

'I was there, and I went to get my pills. I would be seen by a doctor, but here I do not see a doctor. I was asking myself if there is a difference. Is there?' (Participant 8, P1424, 57 years old, male)

Thus, service provision was characterised by a tension between satisfaction with access and frustration with quality and equity.

Theme 2: Stigma and discrimination

Stigma was a recurrent theme, manifesting at multiple levels. Institutionally, segregation reinforced perceptions of discrimination by creating visibly separate pathways for people living with HIV:

'Because we have a special place here where it is only us who are seen there ... I'm asking myself why it is like that because discrimination must be stopped.' (Participant 3, P0924, 47 years old, female)

'Yes, there is a difference; people don't look at you nicely. They just conclude that everyone in the line is here to get pills.' (Participant 9, P1524, 40 years old, female)

Community stigma compounded these experiences, with participants describing gossip, shame, and fear when seen at IDCC:

'When you're starting the therapy, it is difficult ... It's shame. That fact alone of being separated from other people, it increases the shame.' (Participant 1, P0724, 48 years old, male)

Notably, some participants emphasised resilience and adaptation, saying stigma no longer affected them personally, though they recognised its impact on others.

Theme 3: Disclosure of HIV status

Disclosure was experienced as a complex and emotionally fraught process. Some disclosed immediately to family members, while others delayed disclosure for years:

'At first, I took a while to disclose ... I eventually had to tell my family because it was too important for them to know.' (Participant 8, P1424, 57 years old, male)

Fears of rejection, damaged relationships, and loss of employment were central reasons for withholding disclosure:

'I was fearful that if I disclosed, my partner would leave me ... it made me very nervous.' (Participant 10, P1624, 43 years old, female)

In some cases, segregation itself acted as a form of involuntary disclosure:

'I was not ready ... but people could see me going into the IDCC [Infectious Disease Care Centre]. That alone disclosed my status.' (Participant 7, P1224, 37 years old, female)

This tension between the need for support and the risk of exposure highlights the emotional labour required for disclosure decisions.

Theme 4: Impact of segregation on treatment initiation and adherence

Segregation was perceived as a barrier to early treatment initiation. Several participants delayed ART because of fear of being seen at the IDCC:

'Some people delay starting treatment because they are afraid of being laughed at.' (Participant 6, P1124, 36 years old, male)

Adherence was sometimes compromised by employment concerns and fear of inadvertent disclosure:

'At one point, I stopped taking my pills because I was scared my employer might find out and fire me.' (Participant 8, P1424, 57 years old, male)

Yet, counselling and peer support within IDCC enabled some to overcome fear and adhere to treatment:

'After counselling, I found it easier to continue with my treatment, even when others looked down on me.' (Participant 5, P1024, 43 years old, female)

Theme 5: Ethical considerations and psychological impact

Participants voiced concerns about autonomy, confidentiality, and dignity. Segregated consultations, labelled doors, and separate queues contributed to perceptions of violated privacy:

'We all go into the same consultation room, to be examined, and the door is labelled. We all know ourselves.' (Participant 8, P1424, 57 years old, male)

Psychological impacts included fear, shame, guilt, and confusion. For some, the experience of being segregated amplified internalised stigma:

'It made me feel isolated and ashamed. I was confused and guilty, as if I had done something wrong.' (Participant 7, P1224, 37 years old, female)

These findings reflect ethical dilemmas where patient dignity and privacy were compromised by structural practices of segregation.

Theme 6: Positive impact of Infectious Disease Care Centre

Despite challenges, participants highlighted multiple positive outcomes from IDCC services. These included restored health, prolonged life, and empowerment through counselling and education:

'My health improved ... I was able to gain weight and even walk again.' (Participant 10, P1624, 43 years old, female)

'I was made aware that I could still have children, even though I am HIV positive.' (Participant 11, P1724, 37 years old, female)

Psychosocial support was another major gain, with many expressing hope after realising they were not alone:

'It gave me hope to see that I was not alone ... others are also surviving on pills like me.' (Participant 12, P1824, 46 years old, female)

Theme 7: Barriers to service delivery

Structural challenges within IDCCs were described as persistent barriers. These included overcrowding, long queues, restricted ART access, and staff shortages:

'We wait for too long in the queue, sometimes the whole day ... it makes us angry.' (Participant 9, P1524, 40 years old, female)

'We can only get ARVs [antiretrovirals] here, not at other clinics. That restriction makes life difficult.' (Participant 3, P0924, 47 years old, female)

Participants also expressed frustration over limited treatment options:

'I wish there was an injection instead of daily pills, so that I don't have to come back so often.' (Participant 13, P2024, 51 years old, male)

These barriers contributed to missed work, reduced adherence, and overall dissatisfaction, highlighting systemic constraints in HIV care delivery.

Discussion

This study provides comprehensive insights into the experiences of individuals visiting IDCCs in Botswana. Although these centres offer specialised counselling and expert HIV care, they simultaneously heighten the risks of stigma, inefficiency, and inadvertent disclosure of HIV status.^{2,11,12} This paradox illustrates broader challenges across SSA, where vertical HIV programmes have made substantial progress, but now confront the danger of fragmentation as health needs diversify.

Botswana, recognised for its outstanding ART coverage and near achievement of the UNAIDS 95–95–95 targets, currently faces a strategic question: how to sustain HIV-related progress while concurrently tackling the dual issues of stigma and multimorbidity. The findings of this study will provide policymakers with insights on how Botswana can exceed the UNAIDS 98–98–98 2030 targets and eradicate mother-to-child HIV transmission.

Persistent structural barriers perpetuating stigma and disclosure challenges

The inherent configuration of segregated facilities inadvertently discloses individuals' status, and stigma could be an obstacle to accessing care. Nyblade et al. provide evidence that stigma constitutes the primary obstacle to HIV testing, linkage to care, and adherence worldwide.¹³ Katz et al. underscore the substantial influence of this factor in their review of ART adherence in diverse contexts.¹⁴ Furthermore, Setlhare, Wright and Couper emphasise that

stigma in Botswana inhibits both disclosure and prompt healthcare-seeking behaviours.¹⁵ The participants' hesitance to visit the clinic, as revealed by this study, corresponds with findings throughout SSA, where patients deliberately evade ART centres to protect their confidentiality.¹⁶ In Tanzania, patients expressed feelings of shame linked to being observed in an HIV clinic, which hindered their involvement in linkage and care, underscoring the existence of anticipated stigma.¹⁷ Evidence from South Africa, however, suggests that stigma is not the principal factor leading to defaulting.¹⁸

The interplay of gender and relational dynamics complicates the disclosure process. Gutin et al. indicated that women in Botswana manage reproductive expectations and relationship dynamics that impede disclosure.¹⁹ Intimate partner violence (IPV) significantly exacerbates this obstacle. Abebe et al. estimate that over 50% of women with HIV in East Africa encounter IPV, which hinders adherence to ART and affects overall well-being.²⁰ Women in Vietnam adeptly controlled the revelation of health procedures to alleviate stigma.²¹

Our findings suggest that stigma extends not only to the interpersonal level but also within structural frameworks. The physical separation of IDCCs designates patients and perpetuates 'spatial stigma'. Addressing stigma, therefore, necessitates reforms within systems in addition to educational interventions.

Research carried out in Botswana shows that interventions aimed at reducing stigma, which are rooted in Tswana cultural practices, have successfully diminished discrimination related to HIV among women.²² In Zambia, health workers have recognised that stigma in healthcare facilities often mirrors the dominant community norms.²³ In South Africa, adolescent girls reported breaches of confidentiality and discouraging attitudes from staff when requesting pre-exposure prophylaxis.²⁴ In Tanzania, drug users reported experiences of denied care and verbal abuse in HIV clinics.²⁴ The community value systems evident in both the South African and Tanzanian cases significantly permeate the institutional responses. Provider-level stigma persists even in well-resourced systems, such as that of China.²⁵

These findings show the existence of stigma at both institutional and individual levels. Majeed et al. illustrate that multi-tiered, culturally informed interventions markedly improve disclosure and participation in care.²⁶ Any integration reforms targeted at service delivery in Botswana must be accompanied by corresponding stigma management interventions.

System approaches to efficiency, quality, and evidence-based integration

Global evidence strongly supports system integration. Bulstra et al. performed a meta-analysis of integrated HIV

services in SSA, demonstrating consistent enhancements in ART initiation, retention, and viral suppression.⁴ Implementation trials have demonstrated both potential and complexity in integration. In Uganda, integrated HIV and NCD clinics have proven effective in diminishing stigma by normalising HIV care. The Daraja intervention, a case-management model implemented in Tanzania, showed an improvement in HIV clinic linkage, despite the pervasive stigma surrounding the condition.¹⁷

Stepped-wedge and qualitative studies in South Africa have identified opportunities and barriers to integrating hypertension care within HIV services.^{27,28} The TASKPEN trial, carried out in Zambia, is assessing the integration of HIV and cardiometabolic care in accordance with the WHO package of essential non-communicable (PEN) disease framework.²⁹

Data from economic and policy evaluations further substantiate integration. David, Kyalo and Mwangi conducted a study in Kenya that revealed annual cost reductions of approximately 21% per patient through the implementation of integrated HIV-NCD care.³⁰ Adeyemi et al.'s policy review of East Africa verified that most countries are explicitly integrating integration into their strategic plans. The integration of services is fiscally justified, especially in resource-constrained systems such as Botswana, where donor funding has stabilised and the prevalence of NCDs is rising.³¹

The WHO's consolidated guidelines explicitly promote the integration of HIV services with other healthcare services, emphasising the significance of person-centred models in achieving and sustaining the 95–95–95 targets.¹¹

Botswana integration pilots: Evidence and Challenges

Botswana's timely integrated model pilot shows its integration readiness. The InterCARE programme, which incorporates hypertension management within HIV clinics, has shown effectiveness with significant rates of adoption and acceptability.³² Electronic Health Records (EHR) integration and provider training remain difficult.¹³ Gala et al. found patients and providers optimistic, but infrastructure and staff capacity concerns tempered it.³²

The successful implementation of ART has led to an ageing population of individuals living with HIV, marked by increased occurrences of diabetes, hypertension, and cardiovascular disease. Integration not only alleviates stigma but also improves the continuity of care for individuals with multimorbidity.³⁰ However, pilots underscore the importance of a phased implementation, with system readiness as a prerequisite.

An effective integration requires an extensive systemic overhaul. Dzinamarira et al. contend that insufficient infrastructure, a scarcity of healthcare personnel, and disjointed financing represent the primary obstacles to integration in SSA.³³

The situation in Botswana is no different. A decline in donor support exacerbates the pre-existing challenge of sustainability, as underscored in the United States President's Emergency Plan for AIDS Relief (PEPFAR) 2022 Country Operational Plan, which emphasises the significance of efficiency and the financing of domestic initiatives as critical priorities for the future.

The epidemiological evaluations performed by the World Bank similarly highlight Botswana's dual challenge of HIV and the rising incidence of NCDs.¹⁰

In Botswana, health outcomes will be fundamentally influenced by the improvement of the health workforce, the deployment of interoperable electronic health records, and the creation of integrated financing systems. Without these elements, the integration process may complicate matters without realising the desired efficiency.

Gender, youth, and social determinants of health

The results underscore the imperative of tailoring integration strategies for at-risk populations. Women with HIV often face stigma, IPV, and reproductive pressures, all of which negatively impact treatment adherence.^{13,14} Integration must consequently include gender-sensitive counselling and protective measures to alleviate violence. Conversely, youth and young adults who contracted HIV at birth face numerous challenges, including stigma, social isolation, educational inequities, and mental health stressors. Karugaba et al. emphasise that these factors substantially hinder care engagement in Uganda, with consequences that are directly relevant to the youth in Botswana.³⁴ Integration models must be attuned to the requirements of youth, integrating mental health and psychosocial support alongside medical care.

Digital health: Trust and confidentiality

Digital innovations for integration offer both advantages and challenges. The risk increases if confidentiality is breached, potentially intensifying stigma. Research conducted by Orii et al. demonstrated that the confidence of Malawian clients in eHealth platforms was contingent upon strong data privacy safeguards.³⁵ In Botswana, 'privacy by design' will be the fundamental principle for all digital health interventions because of concerns regarding disclosure. The obstacles encountered by InterCARE in implementing electronic health records highlight the imperative of synchronising digital instruments with patient confidence and the capabilities of healthcare providers.³²

Preservation of psychosocial support during reform

Despite criticisms concerning segregation, patients consistently valued the counselling and psychosocial support offered at IDCCs. These strengths are crucial and would significantly aid in preservation during the integration process. Consequently, addressing structural stigma would guarantee

that counselling and psychosocial services are incorporated into new frameworks rather than eliminated.

Policy implications: An adaptive phased strategy

The research findings indicate that a phased integration approach is optimal for Botswana, guided by the principles of implementation science, which includes essential components such as integrated services for HIV and NCDs, alongside the evaluation of stigma and adherence levels:

- Interventions aimed at reducing stigma at both community and institutional levels.
- Enhancing health systems: workforce, electronic health records, financing, and infrastructure.
- Maintenance of psychosocial support within integrated frameworks.
- Development of services that are gender-sensitive and attuned to the needs of youth.

The analysis of regional models holds significant promise for the HIV programme in Botswana. Interventions that address multi-level stigma in both community and clinical environments are crucial. Locally and culturally anchored interventions have shown potential effectiveness,²² while international evidence, including Zambia's TASKPEN and Tanzania's Daraja trial, offers frameworks for integrated and stigma-sensitive service provision.^{17,25}

This phased strategy is consistent with the commitments delineated by UNAIDS Fast-Track, the Universal Health Coverage (UHC) framework instituted by the WHO, and the sustainability agenda of PEPFAR. As a result, Botswana is confirmed as a leader in continental integration.

Limitations of the study

This study was confined to a single facility with a limited sample size, which may impact the transferability and generalisability of the findings; however, this concentration is characteristic of qualitative research. There were financial limitations to have focus groups to facilitate an in-depth understanding of the services from all stakeholders.

Implications and recommendations

Recommendations for clinical practice

- Regular counselling for clients should be provided to promote early acceptance of HIV-positive status.
- Healthcare workers should receive training on appropriate communication strategies when addressing patients during educational sessions to mitigate stigma.
- Integration of services to provide patients with access to medication outside of standard IDCC care hours, thereby facilitating treatment adherence and mitigating the stigma associated with segregation.

Suggestions for future investigation

This study advocates for the establishment of evidence-based integrated care for clients infected with HIV. It is therefore recommended that larger-scale research be conducted to aid the Ministry of Health in formulating service protocols tailored for patients' needs, focusing on optimising care for individuals living with HIV to enhance voluntary testing, disclosure of HIV status, initiation of treatment, and adherence to ongoing treatment.

Centralising treatment to enable patients to access ART at various locations may aid a more normalised lifestyle and improve adherence to the treatment regimen. This approach necessitates a reliable Electronic Management Records (EMR) system that is capable of real-time updates. Additionally, it requires the implementation of robust contingency measures, including offline functionality, paper-based backups, or patient-held records, to ensure continuity of care in instances where the EMR is unavailable.

Conclusion

The study indicates that patients diagnosed with HIV encounter numerous biopsychosocial and psychosocial challenges that they navigate daily, which significantly affect their mental and physical health. Segregation significantly impeded access to care because patients feared stigma and discrimination. Perceived stigma notably influenced participants' self-image, willingness to disclose their status, and motivation to obtain ART medication. Some participants, however, despite experiencing stigma and discrimination, sought assistance because of concerns regarding adverse health outcomes.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

W.G. contributed to the entire body of the work, whereas R.M.O. and T.M. contributed on various parts of the work. T.M. contributed to writing the original draft and the conceptualisation, visualisation, methodology, formal analysis, investigation, project administration, software, validation, data curation, resources, and funding acquisition of the study. T.M. and R.M.O. supervised the study and contributed to the review and editing of the article. R.M.O. also contributed to the analysis of the research. Data were analysed by W.G., R.M.O. and T.M.

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Data availability

The authors confirm that the data supporting the findings of this study are available within the article and its references.

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