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Lived experiences of Household-Based HIV Testing Among Youths in Kaunda Square Community in Zambia: A Hermeneutic Phenomenological Design

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Abstract

This study explores the lived experiences of household-based HIV testing among youths in Kaunda square community in Zambia, a hermeneutic phenomenological approach. Despite Zambia's ongoing efforts to combat HIV through expanded HIV testing and counseling initiatives, testing uptake among youths remains low due to persistent barriers such as stigma, discrimination fears, privacy concerns, and limited access to healthcare facilities. Household-based HIV testing a community-level intervention where trained health workers provide testing and counseling services directly in people's homes has emerged as a promising approach to overcome these barriers. While this strategy has proven effective in increasing testing coverage across sub-Saharan Africa, limited research has explored the experiences of Zambian youths with this model. This study employed a hermeneutic phenomenological design. Purposive sampling with snowball sampling was used to explore and interpret the lived experiences of 18 youths who underwent household-based HIV testing in Kaunda Square, a peri-urban community within Lusaka's Munali Constituency. The research examined perceptions of accessibility, stigma, confidentiality, and the influence of social and cultural factors on youths' decision-making. Findings revealed a range of responses, from increased comfort and reduced stigma, to concerns about privacy and community dynamics. Family involvement provided support yet introduced emotional tension and the experience reshaped HIV awareness, fostering both empowerment and vulnerability. Household based HIV testing showed promise as a youth-friendly strategy and its success depends on culturally sensitive delivery that safeguards autonomy and promotes trust.

Keywords: Youth; Household –Based HIV Testing; Lived Experiences; Zambia; Phenomenology

1. Introduction

HIV remains one of the most pressing public health challenges in Sub-Saharan Africa, with Zambia bearing a significant burden of the epidemic. An estimated 1.3 million Zambians are living with HIV, and youth aged 15–24 represent a disproportionately affected demographic (WHO, 2023). Despite national efforts to expand HIV testing services, uptake among youths remains critically low, particularly in urban communities such as Kaunda Square. This area, like many peri-urban settings, is shaped by socioeconomic disparities, high youth unemployment, and limited health literacy, factors that influence how youths perceive and engage with health services.

Household-Based HIV Testing (HBHT) has emerged as a promising strategy to increase access and reduce barriers to testing, offering convenience, privacy, and the potential to reach underserved populations. Evidence from Zambia suggests that HBHT can significantly improve testing rates among youth, especially in rural and peri-urban areas. However, the success of such interventions depends not only on logistical feasibility but also on how individuals experience and interpret the testing process within their social and cultural contexts. Cultural norms surrounding

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gender roles, family hierarchy, and HIV-related stigma may shape youths' willingness to test, disclose results, and seek care.

A systematic review of HIV testing practices in Zambia highlights persistent barriers such as fear of stigma, misconceptions about testing, and lack of youth-centered services. Moreover, studies have shown that while HBHT is generally acceptable, concerns about confidentiality and family involvement can complicate its implementation. Understanding the lived experiences of youths who undergo HBHT is therefore essential to designing interventions that are not only effective but also culturally and emotionally resonant.

Given this background, this study seeks to explore the lived experiences of youths regarding Household-Based HIV Testing (HBHT) within the Kaunda Square community of Munali Constituency, Lusaka, Zambia. Specifically, it aims to:

- To assess youths' knowledge and awareness of household-based HIV testing services available in Kaunda Square community.
- To explore the perceived benefits and challenges associated with household-based HIV testing among youths in Kaunda Square community
- To understand factors influencing the uptake of household-based HIV testing among youths in Kaunda Square Community

2. Materials and Methods

2.1. Population, Sample, Data Collection and Analysis

This study employed a qualitative research design to explore the lived experiences of youths who participated in Household-Based HIV Testing (HBHT) in Kaunda Square, Lusaka, Zambia, using a hermeneutic phenomenological approach. This methodology enabled the researchers to interpret and uncover deep meanings embedded in participants' personal narratives and social contexts. The study was conducted at Kaunda Square Community Centre in Munali Constituency; a site selected for its diverse youth population and active engagement in HIV prevention programs. The target population included youths aged 18–35 years who had undergone HBHT, as well as key informants such as healthcare workers, community leaders, and program implementers. Participants were selected through purposive sampling to ensure relevance and depth, with snowball sampling used to expand the pool until data saturation was achieved. Data collection involved semi-structured in-depth interviews, gender-segregated focus group discussions, and key informant interviews to capture a range of perspectives. Interviews explored participants' experiences, perceived benefits and challenges, and contextual influences on testing uptake.

2.2. Data generation and Analysis

Data was analyzed thematically using Van Manen's hermeneutic framework, applying holistic, selective, and detailed reading approaches to identify patterns and themes related to HBHT. This rigorous interpretive process provided rich insights into the social and emotional dimensions of HIV testing among youths in a peri-urban Zambian setting

3. Findings

The hermeneutic phenomenological analysis of youths' experiences with household-based HIV testing (HBHT) in Kaunda Square revealed six interrelated themes that illuminate the emotional, social, and structural dimensions of the intervention. These themes reflect the complexity of engaging young people in HIV testing within the domestic sphere and underscore the importance of culturally sensitive, youth-centered approaches

3.1. Navigating Fear and Uncertainty

This theme captures the emotional complexity that youths experienced during their initial encounter with household-based HIV testing (HBHT). For many participants, the realization that testing would occur within the home a space typically associated with safety and privacy triggered intense anxiety. This apprehension stemmed from the fear of receiving a positive diagnosis and the perceived consequences it could have on their social standing, future aspirations, and relationships. The emotional burden was compounded by persistent HIV-related stigma, which continues to influence perceptions despite public health efforts to normalize testing and treatment.

Participants expressed mixed reactions to the presence of health workers in their homes. Some viewed it as an intrusion into their personal space, intensifying feelings of vulnerability. One 22-year-old male participant reflected, *"When I saw*

the testing team arrive, my heart sank. I wasn't ready to face such a serious matter at home... but I knew I had to do it." This quote illustrates the internal conflict between the necessity of testing and the discomfort of confronting such a sensitive issue in a domestic setting.

Conversely, other participants found the home-based approach less intimidating than visiting a clinic. The familiar environment and personalized attention from health workers helped to ease anxiety, suggesting that individual preferences and cultural norms significantly shape perceptions of HBHT. The fear of a positive result was often intertwined with concerns about disclosure, family reactions, and the ability to maintain autonomy and dignity. These concerns underscore the need for robust pre- and post-test counseling that addresses not only the clinical aspects of HIV but also the psychosocial dimensions.

Importantly, the immediate availability of counseling support was consistently highlighted as a mitigating factor. Trained counselors provided emotional reassurance, clarified misconceptions, and guided participants through the testing process. This support enabled many youths to process their emotions constructively and engage more confidently with their health status. Overall, this theme emphasizes the importance of integrating psychosocial support into HBHT programs and highlights the resilience of youth navigating the emotional terrain of HIV testing within the home.

3.2. Value of Privacy and Confidentiality

The theme *Value of Privacy and Confidentiality* emerged as a central yet paradoxical dimension of the household-based HIV testing (HBHT) experience among youth participants. While the home environment offered familiarity and convenience, it simultaneously posed challenges to maintaining the level of privacy and confidentiality that participants desired during such a sensitive health intervention. This tension reflects the complexities of conducting HIV testing in shared domestic spaces, where personal boundaries are often porous.

Participants frequently expressed concern about the proximity of family members during the testing process. The fear of being overheard or inadvertently exposed to others in the household was a recurring source of anxiety. As one 19-year-old female participant noted, *"My siblings were just next door… I kept thinking, what if they hear something?"* This quote illustrates the heightened self-awareness and emotional vigilance that accompanied the testing experience, driven by the potential social repercussions of unintended disclosure. The stigma surrounding HIV, despite ongoing public health campaigns, continues to influence perceptions and behaviors, amplifying the need for discretion.

Conversely, several participants viewed HBHT as a preferable alternative to clinic-based testing, citing the ability to avoid public scrutiny and community gossip. The anonymity of not being seen entering a health facility was perceived as a protective factor. A 25-year-old male participant shared, *"I prefer testing at home… no one sees me entering a clinic or whispers about me."* This sentiment underscores the pervasive fear of judgment in close-knit communities and highlights the appeal of HBHT as a discreet and accessible option.

This theme reveals the dual nature of HBHT: while it offers logistical and emotional advantages, it also demands careful attention to privacy protocols. Participants emphasized the importance of conducting tests in secluded areas of the home, using hushed tones during counseling, and receiving clear assurances of confidentiality from health workers. These insights suggest that the success of HBHT depends not only on its accessibility but also on its sensitivity to the socio-cultural dynamics of the household. Tailoring HBHT strategies to address these concerns aligns with broader public health principles of patient-centered care and ethical service delivery, particularly in contexts where stigma and social surveillance remain potent barriers to engagement.

3.3. Influence of Family Dynamics

Family dynamics emerged as a pivotal factor shaping youths' experiences with household-based HIV testing (HBHT), exerting both enabling and constraining influences. The presence of family members during the testing process was not passive; rather, it actively shaped participants' decisions, emotional responses, and perceptions of the intervention. In contexts where collective well-being and familial cohesion are highly valued, the role of family in health-related decision-making is particularly pronounced.

Several participants described subtle pressures to conform to parental expectations, especially in households where parents encouraged or mandated testing for all members. While this approach may support public health goals, it occasionally led to feelings of coercion and diminished autonomy. One 26-year-old female participant reflected, *"My mum said we should all test… I didn't want to, but I couldn't say no. In the end, it brought us closer."* This narrative

illustrates the emotional complexity of HBHT within family settings—initial reluctance giving way to strengthened familial bonds and open communication.

For others, shared testing was embraced as a collective act of health responsibility. In these cases, the family functioned as a supportive unit, fostering dialogue around HIV prevention and reducing stigma. The shared vulnerability and mutual concern for one another's well-being transformed the testing experience into an opportunity for relational growth and solidarity.

However, not all experiences were positive. Some youths expressed apprehension about parental judgment, particularly regarding sexual activity and perceived risk behaviors. Cultural taboos and generational gaps in understanding sexual health contributed to fears of moral condemnation, which in turn discouraged open communication. Participants reported concealing aspects of their lives to avoid conflict or disappointment, underscoring the need for sensitive facilitation by health workers.

Additionally, limited parental knowledge about HIV transmission and testing sometimes led to misunderstanding or unhelpful reactions, further complicating the emotional landscape for youth. These findings highlight the importance of family-centered counseling that educates all household members and promotes empathetic dialogue. By addressing knowledge gaps and fostering supportive environments, HBHT programs can mitigate negative familial influences and harness the potential of family dynamics to enhance health outcomes.

This theme aligns with sociological frameworks that position the family as a primary agent of socialization and a critical determinant of health behavior, particularly during adolescence and young adulthood (Bandura, 1986). It reinforces the need for culturally attuned, youth-sensitive approaches that recognize the nuanced role of family in shaping HIV testing experiences

3.4. Trust and Connection with Health Workers

The quality of interaction between youth participants and health workers conducting household-based HIV testing (HBHT) emerged as a critical determinant of the overall testing experience. This theme, *Trust and Connection with Health Workers*, underscores the central role of interpersonal dynamics in shaping comfort levels, engagement, and perceptions of the testing process. Participants consistently emphasized that the demeanor, professionalism, and communication style of health personnel significantly influenced their willingness to participate and their emotional response to testing.

A respectful, non-judgmental approach was frequently cited as essential for building trust. Youths, often apprehensive about authority figures or fearful of moral scrutiny, responded positively to counselors who treated them with dignity and empathy. One 21-year-old male participant shared, *"The counselor treated me like an adult. She made me feel safe, and I could ask anything."* This statement reflects the importance of being acknowledged as autonomous individuals capable of making informed decisions. Such interactions fostered psychological safety, enabling open dialogue and reducing defensive barriers.

Confidentiality was another cornerstone of trust. In the household setting, where privacy can be compromised, participants valued health workers who demonstrated discretion speaking in hushed tones, ensuring physical separation during counseling, and handling personal information with care. These practices conveyed respect and professionalism, alleviating fears of inadvertent disclosure and reinforcing participants' sense of security.

Additionally, the provision of clear, age-appropriate information was vital. Health workers who explained procedures, results, and implications in accessible language without jargon or condescension were particularly effective in empowering youth. The ability to address questions patiently and thoroughly further strengthened rapport and facilitated informed decision-making.

This theme highlights that beyond technical competence, the human element empathy, respect, and effective communication is paramount in delivering youth-centered HIV services. These interpersonal qualities transform testing from a clinical procedure into a supportive and empowering experience. The findings reinforce the need for comprehensive training in adolescent-friendly service delivery, emphasizing ethical conduct, cultural sensitivity, and relational engagement. Such approaches align with global health recommendations advocating for youth-responsive HIV prevention and care strategies that prioritize trust-building and meaningful connection (UNAIDS, 2016)

3.5. Empowerment and Behavior Change

For many youth participants, household-based HIV testing (HBHT) represented more than a diagnostic procedure it served as a transformative experience that fostered personal empowerment and catalyzed meaningful shifts in health-related behaviors. This theme, *Empowerment and Behavior Change*, captures the broader psychosocial impact of HBHT, illustrating how engagement with testing prompted reflection, dialogue, and proactive decision-making among adolescents and young adults.

Participants frequently described a heightened sense of agency following the testing experience. The act of confronting their HIV status, receiving clear information, and engaging in counseling contributed to a renewed sense of control over their health. This empowerment translated into tangible behavioral changes, particularly in sexual health practices. One 20-year-old female participant shared, *"After testing, I started being more careful… I talk to my boyfriend about protection now."* This narrative exemplifies how HBHT can initiate open communication about safe sex and encourage responsible choices, even in the absence of a positive diagnosis.

Notably, participants who tested negative did not interpret their results as a reason for complacency. Instead, many viewed the outcome as a wake-up call, prompting a reassessment of risk behaviors and a commitment to preventive measures. These included consistent condom use, reduction in the number of sexual partners, and increased transparency with partners regarding sexual health. The counseling component of HBHT was instrumental in reinforcing these shifts, providing knowledge and emotional support that empowered participants to take ownership of their well-being.

Beyond individual behavior change, the experience of HBHT often inspired participants to become informal advocates for HIV prevention within their peer networks. Several youths reported encouraging friends to get tested, sharing their experiences to demystify the process and reduce stigma. This peer-to-peer advocacy reflects the potential of HBHT to generate a ripple effect, promoting health literacy and collective responsibility within communities.

Overall, this theme underscores the capacity of HBHT to foster empowerment and sustained behavior change among youth. It aligns with established health behavior theories, such as the Health Belief Model and Social Cognitive Theory, which emphasize the role of perceived susceptibility, self-efficacy, and social reinforcement in shaping health actions (Glanz, Rimer, and Viswanath, 2008). These findings highlight the importance of integrating youth-centered counseling and follow-up support into HBHT programs, ensuring that testing serves not only as a diagnostic tool but also as a springboard for long-term engagement with health-promoting behaviors

3.6. Barriers to Follow-Up and Linkage to Care

While household-based HIV testing (HBHT) improved access to initial diagnosis, the transition from testing to sustained engagement in care revealed critical gaps. This theme, *Barriers to Follow-Up and Linkage to Care*, highlights the multifaceted challenges faced by youth participants who tested positive, underscoring between diagnosis and continuity of care.

A dominant barrier was the fear of disclosure and HIV-related stigma. Despite the privacy of home-based testing, participants expressed anxiety about being seen at clinics associated with HIV services. One 23-year-old female participant shared, *"I was given a referral, but I didn't go right away… I was scared people would see me at the clinic."* This fear of public recognition and subsequent stigmatization discouraged timely follow-up, reflecting the persistent social consequences of an HIV diagnosis in many communities.

Logistical constraints further compounded these challenges. Participants cited financial limitations and long distances to health facilities as significant deterrents. For many, the cost of transportation—even for routine visits—was prohibitive, particularly among low-income households. Additionally, the time required to travel often conflicted with school or work obligations, creating a burden that discouraged consistent engagement with care services.

The lack of sustained psychosocial support post-diagnosis emerged as another critical barrier. While initial counseling was provided during HBHT, participants reported a need for ongoing emotional and informational support to navigate disclosure, treatment adherence, and mental health concerns. The absence of peer support groups, individualized counseling, and accessible mental health services left many feeling isolated and overwhelmed, undermining their ability to initiate or maintain care.

These findings underscore the importance of a comprehensive, youth-centered continuum of care that extends beyond diagnosis. Addressing barriers to follow-up requires integrated strategies that include stigma reduction, financial and

logistical support, and robust psychosocial services. Such interventions are essential to achieving the UNAIDS 95-95-95 targets, where successful linkage to care is a critical step in the HIV treatment cascade. The insights from this theme align with global health literature advocating for patient-centered approaches that address the social, economic, and psychological determinants of health (UNAIDS, 2020)

4. Discussion

4.1. Future Household-Based HIV Testing Programs

A pivotal insight emerging from this study is the critical role of trust and interpersonal connection between youths and health workers in the success of home-based HIV testing programs. Participants consistently emphasized that respectful, non-judgmental engagement fostered openness and built the trust necessary to disclose concerns and accept testing outcomes. These findings reinforce the importance of adolescent-sensitive counseling approaches, as highlighted by Lapsley (2020), who advocated for empathetic and youth-centered communication strategies in health interventions. The data strongly suggest that the interpersonal competencies of health providers particularly active listening, empathy, and culturally attuned interactions are as vital as clinical expertise when addressing the sensitivities surrounding HIV testing among young populations. As such, investment in comprehensive training for health workers, emphasizing soft skills and youth-friendly service delivery, is essential for enhancing engagement and optimizing health outcomes in home-based contexts.

Despite improved accessibility to initial diagnosis through household-based testing, the study uncovered persistent challenges in follow-up and linkage to care for participants who tested positive. These barriers, including stigma, financial and geographic constraints, and inadequate psychosocial support, mirror findings by Barnabas et al. (2016), who similarly noted disruptions in the continuum of HIV care following initial testing. The evidence underscores that while household testing may facilitate entry into the care cascade, it must be embedded within a robust and well-resourced system that addresses these multifaceted impediments. Without structured linkage-to-care and retention strategies, the long-term impact of increased testing uptake may be diminished, failing to yield sustainable improvements in health outcomes for individuals living with HIV.

These findings offer substantive empirical support for the application of the Theory of Planned Behavior (Ajzen, 1991) as a conceptual framework for understanding HIV testing behaviors among youths. Participants' attitudes toward testing such as perceived benefits versus fears alongside subjective norms shaped by family and peer influence, and perceived behavioral control encompassing access, privacy, and self-efficacy, emerged as pivotal in shaping their decision-making. The study illustrates how these theoretical constructs manifest in practice, providing a meaningful foundation for designing more responsive and effective youth-centered HIV interventions. Tailoring strategies to address each component of the theory may enhance motivation to engage with testing and subsequent care services.

To optimize the reach, equity, and youth-responsiveness of future household-based HIV testing services (HBHTS), programmatic designs must reflect the evolving realities, preferences, and constraints faced by adolescents and young adults. The following recommendations offer strategic guidance for enhancing accessibility, acceptability, and sustained engagement in HBHTS programs.

Traditional clinic operating hours frequently conflict with the educational, occupational, and social schedules of youths, thus impeding service utilization. As evidenced by the current study, rigid appointment frameworks often result in missed opportunities for timely testing. It is therefore recommended that HBHTS programs adopt flexible scheduling models, offering services during evenings and weekends to align with youths' availability.

Furthermore, allowing for pre-scheduled appointments as opposed to solely relying on unannounced home visits can empower young individuals with a sense of agency and control over the testing process. This client-centered approach is consistent with youth-friendly service delivery paradigms that prioritize respect for time, privacy, and personal circumstances (Population Council, 2018). While HBHTS provides a degree of privacy, findings from this study underscore lingering concerns about confidentiality within shared household environments. As such, future programs should diversify their testing options by integrating HIV self-testing (HIVST) as a complementary modality. HIVST enables individuals to initiate testing in a private, self-selected space and timeframe, offering unparalleled discretion and convenience.

However, it is critical that HIVST be embedded within a comprehensive support framework. This includes the provision of clear instructional materials, access to virtual or telephonic pre- and post-test counseling, and robust referral

pathways to ensure linkage to care for those who test positive. A hybrid model that blends autonomy with structured support can address privacy concerns while maintaining continuity of care (World Health Organization, 2019).

To ensure that HBHTS programs are both effective and equitable, it is imperative to move beyond aggregate-level data reporting. Disaggregated data—categorized by age, gender, geographic location, socioeconomic status, and other relevant demographics—can illuminate disparities in testing access and engagement.

This granularity allows for the identification of underserved subpopulations and facilitates the tailoring of interventions to meet specific needs. Moreover, ongoing evaluation using disaggregated data supports evidence-based program refinement, enabling more strategic resource allocation and policy development. Such an approach is essential for fostering inclusive HIV responses that are responsive to the diverse lived realities of youth populations (UNAIDS, 2015)

4.2. Health Service Providers

Health service providers occupy a central role in the implementation and success of HIV testing and care interventions, particularly among youth populations. The present study underscores that provider interactions are instrumental in shaping adolescents' perceptions of safety, trust, and engagement. Accordingly, the following recommendations are advanced to enhance provider capacity and service delivery within household-based HIV testing services (HBHTS).

4.2.1. Enhance Training in Youth-Sensitive Communication and Counseling

Empirical evidence from this study highlights that the demeanor and communication style of health workers profoundly influence youths' comfort, trust, and willingness to participate in HIV testing. Consequently, training curricula for professionals involved in HBHTS must be comprehensively revised to incorporate modules on adolescent development, youth-responsive communication, and psychosocial support strategies. Emphasis should be placed on active listening, non-judgmental counseling, and empathetic dialogue—particularly in navigating sensitive subjects such as sexuality, risk behaviors, and HIV status.

Furthermore, gender-sensitive approaches must be prioritized. Providers should be equipped to recognize and address the distinct ways young men and women articulate concern, process risk, and engage with health services. Confidentiality training is especially crucial in household environments, where privacy may be compromised. Practical exercises such as role-play and case simulations should be employed to build provider proficiency in navigating complex family dynamics and ensuring discreet service delivery (World Health Organization, 2017).

4.2.2. Private and Confidential Testing Spaces within Home Environments

While HBHTS enhances accessibility, the study reveals that privacy concerns remain a major impediment to uptake. Health service providers should be trained to conduct environmental assessments prior to initiating testing, identifying viable private spaces within homes. In instances where such spaces are not readily available, mobile partitions, temporary tents, or other adaptable solutions should be utilized to safeguard confidentiality.

Scheduling flexibility such as arranging testing during times when fewer household members are present can further optimize privacy conditions. Providers must initiate clear communication with both the household head and the adolescent client regarding confidentiality expectations and procedures. This proactive stance not only respects young clients' rights to privacy but also fosters trust and facilitates open engagement during pre- and post-test counseling (UNAIDS, 2019).

4.2.3. Standardize Post-Test Support through Accompanied Referrals and Peer Navigation

A notable gap in linkage to care was identified among participants who received a positive diagnosis. To address this, HBHTS protocols should be revised to institutionalize comprehensive post-test support. Rather than relying solely on referral slips, providers should implement accompanied referral strategies in which clients are physically escorted to care facilities by trained health workers or peer navigators.

Peer navigators' youths living with HIV can provide essential emotional support, offer relatable lived experiences, and demystify the care continuum. Their involvement reduces stigma and bolsters the confidence of newly diagnosed youths. Follow-up mechanisms, such as phone-based check-ins or home visits (with informed consent), should be standardized to monitor engagement and troubleshoot emerging challenges. Such wraparound support aligns with global HIV care priorities and is critical for operationalizing the UNAIDS 95-95-95 goals (UNAIDS, 2020)

4.3. Policy Makers

Policymakers serve as pivotal actors in shaping the legal, regulatory, and operational frameworks that govern the delivery of HIV testing and care services. To ensure that household-based HIV testing services (HBHTS) for youths are equitable, ethical, and sustainable, the following policy recommendations are proposed based on findings from this study.

4.3.1. Revise and Enforce Guidelines on Youth Consent, Confidentiality, and Provider Conduct

Current national and regional policies may insufficiently account for the complexities of conducting sensitive health interventions in household settings, particularly for minors and dependents. It is imperative that policymakers revise existing guidelines to delineate clear, age-appropriate consent procedures, ensuring that youth autonomy is respected while acknowledging the nuanced role of parental involvement.

Updated guidelines must also include explicit protocols on maintaining confidentiality within domestic environments, with emphasis on discreet communication, secure data handling, and ethical service delivery. Furthermore, standardized expectations for provider conduct—such as non-discrimination, respect for autonomy, and the prevention of coercion—should be institutionalized. Enforcement mechanisms including routine monitoring and audits are essential to uphold these standards and safeguard the rights and well-being of adolescents (World Health Organization, 2015).

4.3.2. Expand Linkage-to-Care Infrastructure to Support Timely ART Initiation

The study revealed persistent challenges in linkage to care following a positive diagnosis, underscoring the need for comprehensive policy interventions. Policymakers should prioritize the funding and operationalization of youth-responsive linkage protocols that facilitate prompt initiation of antiretroviral therapy (ART).

Innovative models including mobile clinics and community-based ART delivery platforms—should be scaled to bring services closer to high-need populations and minimize geographic and financial constraints. Support mechanisms such as transport subsidies and dedicated transit services for newly diagnosed individuals are critical to improving retention and care continuity. Collectively, these strategies support more effective implementation of the UNAIDS 95-95-95 targets among youth populations (UNAIDS, 2020).

4.3.3. Invest in Integrated, Youth-Friendly Service Models

Youths frequently encounter interrelated health challenges spanning sexual and reproductive health, mental health, and general wellness. Policymakers are encouraged to allocate resources toward integrated service delivery models that bundle HIV testing with additional youth-centered health services.

Such models should facilitate seamless access to contraception, STI screening and treatment, mental health support, and routine health assessments within a single service encounter. By reducing fragmentation and enhancing service convenience, integrated health systems promote holistic youth development and align with global priorities on primary healthcare reform (UNFPA, 2019). This approach not only elevates health outcomes but also encourages sustained engagement with health services by reducing stigma and promoting comprehensive care

4.4. Community Leaders and Stakeholders

Community leaders including religious figures, traditional authorities, youth organizations, and civil society actors—play a pivotal role in shaping public attitudes and social norms related to HIV prevention, testing, and care. Their influence within local settings renders their active engagement indispensable to fostering supportive environments for youth-centered HIV interventions. Based on the findings of this study, the following recommendations are proposed to optimize their contributions.

4.4.1. Champion Community Sensitization to Reduce HIV-Related Stigma

Stigma remains a pervasive barrier to HIV testing and care, particularly among youths. Community leaders are uniquely positioned to drive localized sensitization efforts aimed at dismantling harmful misconceptions and fostering inclusive, health-positive social norms. Evidence from this study highlights the urgent need for sustained public education campaigns that normalize testing and reposition HIV as a manageable chronic condition.

To maximize reach and impact, campaigns should utilize culturally relevant communication modalities, including local radio programming, community forums, traditional storytelling methods, and social media platforms. Messaging should

emphasize that seeking HIV testing is an act of responsibility and that individuals living with HIV deserve dignity, support, and full integration within community life. By promoting accurate knowledge and challenging discriminatory attitudes, community-based sensitization can foster environments where youths feel empowered to seek care without fear of judgment or ostracism (UNAIDS, 2015).

4.4.2. Facilitate Family Engagement through Parental Education

The study revealed that family dynamics particularly perceived parental judgment significantly influence youths' decision-making around HIV testing. Accordingly, community leaders should support the implementation of parental education programs designed to improve health literacy and facilitate constructive intergenerational communication.

These programs should equip parents with accurate information about adolescent sexual and reproductive health, HIV prevention, and effective dialogue techniques. The goal is to foster open, non-punitive family conversations that affirm youths' agency and promote informed decision-making. By positioning parents as allies in health-seeking behavior, such initiatives can help shift family structures into supportive spaces for adolescent wellbeing (UNICEF, 2019)

4.4.3. Empower Youths through Peer-Led Interventions

Peer influence emerged in this study as a potent driver of HIV testing engagement. Community stakeholders must therefore prioritize peer-led intervention models, recognizing the value of youth-led advocacy and education. Rather than casting adolescents solely as recipients of programming, these approaches should engage young people as active co-designers and facilitators.

Youth peer educators and champions should be trained in disseminating accurate health information, providing psychosocial support, and promoting HIV testing within their networks. Such empowerment fosters credibility, cultural resonance, and sustained community engagement. It also encourages a sense of ownership and leadership among youths, strengthening the long-term viability of HIV prevention initiatives (World Health Organization, 2016)

5. Conclusion

This study yields several critical conclusions regarding the implementation and effectiveness of household-based HIV testing services (HBHTS) among youths at the Kaunda Square Community Centre. Foremost is the confirmation that HBHTS constitutes a strategically valuable modality for enhancing testing uptake among adolescents and young adults who encounter substantial barriers to accessing conventional clinic-based services. By directly addressing geographical and logistical challenges including transportation constraints and limited clinic operating hours, HBHTS advances accessibility and reduces opportunity costs associated with seeking care. This is particularly salient in resource-constrained contexts, where traditional health infrastructure may pose significant limitations to consistent engagement with HIV services.

However, the data compellingly illustrate that the efficacy of HBHTS transcends mere logistical convenience. Its impact is deeply contingent upon the ethical, psychosocial, and interpersonal dimensions of service delivery. Maintaining confidentiality, ensuring informed consent, mitigating stigma, and establishing reliable pathways for linkage to care are all foundational to the success of HBHTS. Participant narratives reveal that HIV testing in home settings is not a purely biomedical encounter, but rather a complex emotional and social experience characterized by fear, uncertainty, familial influence, and competing demands on privacy within shared living environments

External social factors including family dynamics, gender norms, existing knowledge and attitudes toward HIV, and critically, the communication style of health workers were found to significantly shape youth responses to HBHTS. Family support served as a facilitator in many instances, while familial pressure could undermine voluntary participation, emphasizing the need for culturally attuned, autonomy-respecting interventions Similarly, the role of empathetic, non-judgmental health workers in fostering trust and enabling open dialogue emerged as vital, highlighting the importance of specialized training in youth-responsive and gender-sensitive service provision.

Notably, while HBHTS was effective in surmounting structural barriers to testing, it did not eliminate longstanding psychosocial challenges such as stigma, fear of disclosure, and the complexity of navigating post-diagnosis care. Therefore, the sustainability and ultimate success of HBHTS initiatives depend on their integration within broader support ecosystems that include individualized counseling, ongoing community sensitization efforts, and robust referral networks. These systems must be designed to uphold the dignity and agency of young individuals, empowering them to make informed health decisions and maintain long-term engagement with the HIV care continuum. Absent such

comprehensive support, increases in testing uptake may fail to produce meaningful improvements in health outcomes or continuity of care.

Compliance with ethical standards

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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