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Lived Experiences of Pre-Exposure Prophylaxis Adherence Among Partners in Discordant Relationships Receiving Care at Kisenyi Health Centre, Uganda

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Abstract

Introduction: HIV in serodiscordant couples remains a key driver of new HIV infections in sub-Saharan Africa. Pre-exposure prophylaxis (PrEP) is highly effective in preventing HIV acquisition among HIV-negative partners, but its effectiveness is dependent on sustained adherence. Evidence on the lived experiences shaping PrEP adherence among seronegative partners in discordant relationships remains limited in Uganda.

Methods: This study employed a qualitative descriptive design with a phenomenological orientation to explore the lived experiences of PrEP adherence among HIV-negative partners in serodiscordant relationships and it was conducted at Kisenyi Health Centre IV in Kampala, Uganda. Twenty-two in-depth interviews with HIV negative partners in discordant relationships who were enrolled on PrEP between September 2024 and March 2025 and four key informant interviews with health workers involved in PrEP delivery were conducted. Audio-recordings were transcribed verbatim, translated where necessary, and analyzed thematically using NVivo version 14.

Results: Facilitators of PrEP adherence included counselling by health workers, partner support and care, desire to protect children, marital commitment, and disclosure to trusted friends. Barriers to PrEP adherence included limited access to healthcare services, forgetfulness, negative perceptions and misconceptions about PrEP, pill burden, and drug stock-outs. Coping mechanisms to PrEP adherence included taking PrEP after meals and drinking plenty of water, synchronized pill-taking with partners, personal motivations, and adherence to health worker instructions.

Conclusions: PrEP adherence was shaped by a complex interplay of psychosocial, relational, and structural factors. Health worker counselling and partner support fostered trust, motivation, and shared responsibility, strengthening adherence behaviors. However, participants faced persistent barriers, including stigma, misinformation, PrEP stockouts, transportation challenges, and long distances to health facilities, which threatened continuity of use. Despite these challenges, participants demonstrated resilience by adopting practical coping strategies such as integrating PrEP into daily routines, coordinating medication schedules with partners, managing side effects, and drawing motivation from personal goals such as preserving relationships and having children.

Keywords: Pre-exposure prophylaxis; HIV Sero discordant couples; adherence; lived experiences; Uganda

Background

Globally, HIV remains a major public health challenge. By 2024, an estimated 40.8 million people were living with HIV, with approximately 1.3 million new infections and 630,000 deaths due to AIDS-related illnesses [1]. Within sub-Saharan Africa, serodiscordant couples account for nearly 30% of new HIV infections, with a regional prevalence of HIV of about 10.9% among discordant couples[2]

The incidence of HIV discordance among married and cohabiting couples in Africa ranges from 3% to 20%. For example, prevalence rates of HIV serodiscordance have been reported between 1.8%–23.6% in Ethiopia [3], 16.5% in Tanzania and as high as 49.2% in Uganda [4].

To address the risk, the World Health Organization recommends Pre-Exposure Prophylaxis (PrEP) for HIV-negative persons at high risk of infection [5]. PrEP has demonstrated strong efficacy in preventing HIV transmission among discordant couples [6, 7]. Despite its effectiveness, adherence remains a major challenge. Studies show that more than 80% of those individuals initiating oral PrEP discontinue within the first month [8], and adherence among discordant couples is often irregular.

A study conducted in Uganda revealed that discordance among participants was 4.8%, slightly lower than the national prevalence of 5%, and 52.2% of infected couples are discordant [9]. This positions discordant couples as a priority group for HIV prevention [3]. However, non-adherence to PrEP remains alarmingly high, with rates reaching 48% among partners in discordant relationships even before HIV-positive partners achieve viral suppression through ART [10, 11]. At Kisenyi Health Centre, it is estimated that about 80% of patients on PrEP fail to adhere within a given quarter of the year [12].

Previous research indicates that different factors, including emotional stress, fear of side effects, stigma, daily pill-taking, and systemic challenges such as stock-outs, contribute to PrEP non-adherence [13]. Moreover, optimal adherence requires consistent PrEP use during periods of HIV risk, yet suboptimal adherence contributes close to 60% of new HIV infections among discordant couples [14]. The Ministry of Health in Uganda launched a national PrEP rollout in 2017, prioritizing discordant couples as a key population [15-17] This program included tailored interventions such as counselling, education on maintaining HIV-negative status, and strategies to

overcome individual barriers like stigma, depression, and substance use [18-20]. Despite these efforts, PrEP adherence among discordant couples remains low at Kisenyi Health Centre.

Previous studies have largely examined PrEP uptake and adherence among other key populations such as commercial sex workers, breastfeeding mothers, men who have sex with men , adolescent young girls and women [16, 21, 22] leaving a significant gap in understanding the socio-cultural, relational, and systemic factors that influence adherence among discordant couples in an urban slum health facility like Kisenyi Health Centre [23]. There is limited understanding of how HIV-negative partners navigate challenges, cope with their circumstances, and sustain adherence over time. Addressing this gap is critical to designing interventions that resonate with the unique needs of this population, receiving care at a health facility that may be affected by the complexities of urbanicity. This study, therefore, explored the lived experiences, facilitators, barriers, and coping mechanisms of PrEP adherence among partners in HIV-discordant relationships receiving care at Kisenyi Health Centre.

Methods

Study design and setting

This study employed a qualitative descriptive design with a phenomenological orientation to explore the lived experiences of PrEP adherence among HIV-negative partners in serodiscordant relationships. A phenomenological approach was used to understand how participants perceived, interpreted, and made meaning of their experiences with PrEP adherence, while a qualitative descriptive approach enabled the incorporation of healthcare workers' perspectives to provide contextual on adherence [24]. The study was conducted at Kisenyi Health Centre, a public health facility located in Kampala city, Uganda and managed by Kampala Capital City Authority. The facility provides comprehensive HIV prevention, care and treatment services, including PrEP delivery, and serves a large and diverse population, including individuals with HIV infection with nearly 9,000 clients currently in care [25]

Study participants

The study population comprised HIV-negative partners in serodiscordant relationships who were receiving PrEP services at the health facility. Eligible participants were adults aged 18 years and above, both males and females, enrolled on PrEP for at least six months between September 2024 and March 2025. In addition, health care providers in ART clinic who are directly involved in

PrEP service delivery at the facility were recruited as key informants to provide contextual insights into adherence patterns and service delivery challenges. These included counsellors, nurses and navigators (the person who works as a peer for clients).

Sampling and sample size

Participants were recruited using maximum variation purposive sampling technique. Individuals were selected based on their characteristics relevant to the study objectives in order to capture diverse perspectives and experiences [26] including sex, age, educational level and healthcare provider role. Adherence was determined by consistent PrEP refills for a minimum period of six months and eligibility of participants was verified through facility clinic registers by the help of health worker. Sample size was determined by thematic saturation whereby data collection continued until no new themes or insights emerged from the interviews. In total, 22 In-depth interviews (IDIs) were conducted with PrEP users, and four key informant interviews (KIIs) were conducted with health workers.

Data Collection and Tools

Data were collected between April and May 2025 by SN§ and AK. Semi-structured KIIs and IDIs guides were used for face-to-face interviews. IDI participants were identified during routine clinic visits and client exit interviews were conducted. IDI guides explored participants' experiences with PrEP use, perceived facilitators, barriers to adherence, and coping strategies. While KII guides explored the knowledge of health workers about the subject matter. The expected themes from the data were side effects, myths and misconceptions, pill burden, social support, counselling, sharing information, desire to protect children among other themes. Interviews were conducted in either English or Luganda commonly spoken native language by clients attending HIV clinic at Kisenyi HC, depending on participant preference, and lasted between 28 to 45 minutes. All interviews were conducted from private room at the health facility to ensure confidentiality and were audio-recorded. Ethical approval was obtained from the Makerere University School of Public Health Research and Ethics Committee (MakSPH-REC 571). Additional, administrative clearance was sought from Kampala Capital City Authority. Written informed consent was obtained from all participants prior to participation in the study.

Data management and analysis

Audio recordings were transcribed verbatim. Interviews conducted in Luganda were simultaneously translated into English during transcription. Transcripts were reviewed against the original recordings by S.N[§] and AK to ensure accuracy and completeness. A standardized naming convention was used for both KIIs and IDIs to ensure organization and confidentiality. For KIIs files were labelled according to 'Profession', participant number, and sex (*Health worker-01-female*). For IDIs were labelled as type of interview, participant number, sex, and participant's age (IDI-01-Female-28). Data were analysed thematically using NVivo version 14 by S.N[§]. Coding was conducted iteratively, beginning with inductive coding and later deductively but informed by the study objectives, followed by refinement and organisation of codes into subthemes and overarching themes. Emerging themes were reviewed and refined by S.N[§], SPSK, JNB. Illustrative quotations were used for key themes.

Results

Demographic characteristics

Twenty-two IDIs and 4 KIIs were conducted. Among IDIs participants, majority were female 73% (16), most of participants had completed at least secondary education 54% (12) and majority belonged to the Pentecostal religion 41% (9), followed by Catholics 27% (6). IDI participants were aged between 22 and 45 years. For KII participants, 75% (3) were female, all had tertiary education and 50% (2) were Anglican, 1 Moslem and 1 Pentecostal. The demographic information of serodiscordants is summarized in table 1 below.

Table 1: The demographic characteristics of serodiscordants

Category	Frequency (n=22)	Percentage (%)
Sex		
Female	16	73
Males	6	27
Age		
22-25	5	23
26-35	8	36
36-45	9	41

Educational level		
Primary	5	23
Secondary	12	54
University	5	23
Religion		
Catholic	6	27
Pentecostal	9	41
Muslim	4	18
Anglican	3	14

Facilitators of PrEP Adherence Among Discordant Couples.

Serodiscordants reported several facilitators that strengthened their commitment to PrEP adherence, including: counselling and support by a health worker, partner support and care, desire to protect children, the desire to protect one's life, love for one another, sharing information, desire to enjoy sex, as explained below.

Counselling and support by a health worker.

Most of the serodiscordants reported that counselling by health workers was a critical enabler of PrEP adherence which encompassed emotional encouragement, problem solving (for example transport support), and follow-up call reminders. These calls were seen as a sign of genuine concern and served as a helpful tool, especially for those who struggled with forgetfulness or lacked strong social support at home.

> *The health workers who supply the drugs first counselled us and whenever I go for a visit. They ask how the drugs are treating me. … She is a very kindhearted lady because even when you are trying to give up on the drugs. She will endeavor to check on you to follow up and remind you about collecting a new dose a week before. (IDI-5- female-28)*

A health worker had this to say,

> *"We call them as their dates are about to, like a week to remind them of their return dates. We always ask them, how the drugs are treating them"* (*Health worker* -1-male).

Partner support and care.

More than half of the serodiscordants described their partners as not only aware of their PrEP use but actively engaged in supporting adherence emotionally, practically, and financially. This involvement extended beyond routine reminders and was perceived as a reflection of deep love and commitment. Partner support strengthened the bond between couples, reinforced the shared goal of remaining healthy and HIV free, and motivated adherence by reducing feelings of isolation. PrEP use was often framed as a mutual sacrifice undertaken for the wellbeing of the relationship.

> "*My wife usually reminds me to take my medication since she also takes her ARVs. Even when I don't feel like taking the drugs, she continues to remind me that it is time. Sometimes, when I am stressed with personal problems like financial difficulties or fatigue, she brings me a glass of water together with the drugs." (IDI-22-male-32)*

Desire to protect children.

The majority of serodiscordants 16 out of 22 expressed a strong emotional bond with their children and a profound sense of responsibility to preserve family stability. Protecting children was described as a central motivation for adherence, with many emphasizing that PrEP use was not only a personal protective measure but also a safeguard for their children's future. This sense of duty towards children influenced health-seeking behaviour and reinforced adherence, as participants viewed PrEP as a means of protecting not only themselves but also the wellbeing future of their families.

> *"It's hard to separate with your husband who has been looking after you and your children and then go away to start another life. It becomes very challenging because of the children and the things we have built together for them."* (IDI-1-female-35).

This was backed up by a quotation from the health worker.

> "*Couples with children have to stay and support each other to raise their children"* (*Health worker* - 4 -female).

The desire to protect one's life.

Half of the PrEP users, living in a serodiscordant relationship was a constant reminder of their vulnerability to HIV infection. This awareness fostered a strong determination to preserve their health and avoid acquiring a lifelong condition that could compromise their future. Participants emphasized that their lives held value not only for themselves but also for their loved ones, children, and partners. PrEP was therefore perceived as a lifeline means of safeguarding their health and ensuring survival in a high-risk context.

> "*I take this PrEP for the sake of my wellbeing because I have seen all my close friends taking ARVs. So, it motivates me to continue adhering to PrEP in hope that one day, I will stop taking it instead of being like those who have to take ARVs forever".* (IDI-11- female-24).

Love for one another.

A quarter of serodiscordants, love between partners emerged as a profound motivator for PrEP adherence. They described their decision to initiate and remain on PrEP not, merely as a health choice but as an act of love, rooted in care, empathy, and a desire to protect their partner. The emotional bond with their partner was seen as too strong to risk being broken by HIV, and adherence was framed as a way of safeguarding that relationship.

> *"I love my wife because of being good in bed, and so I don't want to lose her to other men. Then I had to look for a solution that could ensure that I stayed with her. So, I have to take the PrEP so that we can stay together"* (IDI-6-male-28).

Sharing information.

Disclosure of PrEP use to trusted individuals among most of the serodiscordants provided emotional relief and created supportive networks that encouraged adherence. Group counselling sessions and experience sharing during peer discussions were particularly valued, as they reduced feelings of isolation and offered moral encouragement.

> *"Sometimes when we are in those group counselling, they share people's experiences, and it encourages you to be strong because you don't feel alone in the situation."* (IDI-16-female-26)

This was backed up by a health worker who stated,

> "*Sometimes we even tell them stories about clients who stopped using the PrEP and got HIV, and that encourages them to stay focused on taking their PrEP"* (*Health worker* -3-female).

Desire to enjoy sex.

Although less frequently mentioned, among 20% of the serodiscordants, the desire to enjoy sex without using condoms emerged as a motivator for PrEP adherence. Some participants reported that condom use reduced sexual pleasure, caused discomfort, or disrupted intimacy. For these individuals, PrEP offered an alternative form of protection that allowed them to maintain closeness without the perceived barrier of condoms. One participant explained:

> *"It is very weird for me to use it. I just prefer having sex without protection. That was even my main reason for adherence to taking PrEP. I would not have managed to remember wearing condoms every day"* (IDI-6-male-28).

Barriers to PrEP adherence among discordant couples.

Serodiscordants reported a range of interconnected barriers that undermined their ability to adhere to PrEP consistently. These challenges were side effects, pill burden, drug stock out, forgetfulness, negative perceptions and myths, sharing information among colleagues, limited access to health facilities as explained below.

Side effects.

A third of the serodiscordants experienced side effects such as nausea, dizziness, vomiting, headaches, stomach pain, fatigue, weight gain, and loss of appetite. These symptoms are often pronounced during the initial adjustment period, making adherence difficult.

> *"They first gave me a headache and stomach-ache, and I felt like giving up. My life suddenly changed, and I would always feel nauseated like a pregnant woman. I would also get dizzy, sleep of, and even have nightmares. I was about to give up and just get HIV, but then I got some motivation and continued taking it."* (IDI-2-female- 45)

Pill burden.

The daily requirement to take PrEP was described as burdensome by many serodiscordants, not only due to physical pill size but also the psychological weight of medication use. Participants shared that adherence felt exhausting over time, especially when they felt healthy and not experiencing any visible signs of illness.

"It is very hard to take these drugs especially when you are not HIV Positive because it is like taking Coartem when you don't have malaria" (IDI-11-female-24).

Drug stock out.

To some serodiscordants 7out of 22, stockouts disrupted medical routines and eroded trust in the health system. Participants expressed frustration at being denied refills or asked to return later, which heightened anxiety about HIV exposure.

"The health workers complain that they don't have PrEP, that the remainders are for only pregnant women and breastfeeding mothers. And we are left to suffer as discordant couples without pregnancy" (IDI-2-female-45).

Forgetfulness.

Despite short message services reminders and peer support, forgetfulness remained a challenge, particularly for some serodiscordants juggling multiple responsibilities. Work, childcare, travel, or emotional stress often interfered with regular dosing schedule.

"*I find myself forgetting to take it, especially when I am at work. You can get busy with clients, and I may forget where I kept it even"* (IDI-10-male-28).

Negative perceptions and myths.

Half of the serodiscordants, stigma, misinformation, and fear of judgement discouraged adherence to PrEP. Both internalized and external stigma — often amplified by misinformation shaped how individuals engaged with PrEP within their relationships. Some participants reported feeling embarrassed to visit ART clinics, fearing that community members would assume they were HIV-positive. A health worker explained, *"They feel embarrassed to enter the ART clinic to avoid being identified by people who know them, because people will think that they have HIV"* (*Health worker* -3-female). This fear of being wrongly labelled, gossiped about, or discriminated against led some participants to hide their medication, skip doses in the presence of others, or avoid taking PrEP altogether. Misconceptions about PrEP being equivalent to antiretroviral therapy (ARVs) further fuelled anxiety and confusion.

"Others claimed that PrEP was ARVs and they just want us to swallow ARVs then I also started wondering if I was actually taking ARVs. I felt like I had HIV in its early stages which would later grow. I got scared and consulted my uncle, and he explained everything to me". (IDI-10-male-28)

Mixed reactions on sharing information among colleagues.

While disclosure and open communication could foster support, in certain contexts it led to gossip, discrimination, and social isolation. Some serodiscordants reported mixed reactions on sharing information about PrEP with community members or peers sometimes resulted in stigmatization, as PrEP use was frequently misunderstood to signify promiscuity or HIV-positive status. These misperceptions discouraged adherence, particularly in communities where confidentiality was difficult to maintain.

> *" Most family members can isolate you, and that's why I didn't tell them. Some mistake PrEP to be ARVs and then mock or isolate you. Others even refuse to use the same utensils. So, it is better to share your situation with only one trusted friend or family member."* (IDI-6-male-28)

Coping mechanisms to PrEP adherence among discordant couples.

Despite facing multiple challenges, serodiscordants demonstrated resilience by adopting a range of practical and emotional coping mechanisms that enabled them to support continued PrEP adherence over time. These strategies included taking the pill after eating food and drinking plenty of water, counselling from health workers, swallowing with the partner, maintaining purpose and motivation, swallow as instructed, picking the drugs at a convenient time as expounded on below.

Taking the pill after eating food and drinking plenty of water

One of the most reported strategies was taking PrEP after meals and with plenty of water. A third of serodiscordants found that this approach reduced or eliminated side effects such as nausea, dizziness, and stomach pain, making the medication more tolerable.

> "*The best advice I can give is to continue taking the drugs accompanied by adequate eating and drinking to allow easy circulation of the drugs in the body*" (IDI-2-female-45).

This is backed up by a quotation from the health worker,

> "*I also take PrEP myself, and side effects normally happen in a short period. To the biggest percentage, let me say it can be handled by drinking a lot of water.*" (*Health worker* -2-female).

Counselling from health workers.

Majority of the serodiscordants 19 out of 22 consistently emphasized the importance of both initial and ongoing counselling, which provided knowledge, reassurance, and emotional support

throughout their PrEP journey. Health workers played a central role in reinforcing the purpose of adherence and offering encouragement that made the routine feel more meaningful and less burdensome. Counselling was described as a critical resource for overcoming challenges that participants felt unable to manage on their own.

> "*Such a person requires counselling from health workers. If you feel challenged in any way, it's better to consult the health workers for assistance. It can help you because as an individual, it may be hard to solve, but if you share with the health workers, it may help you a lot"*. (IDI-16-female-26)

Swallowing with the partner.

Among a quarter of the serodiscordants taking PrEP together with a partner was described as both a practical and a symbolic act. It created accountability, routine, and mutual encouragement, reinforcing the couple's shared commitment to HIV prevention. "*If your partner is willing, you can set an alarm and cooperate with your spouse since you are both on medication. You keep reminding each other because it is called a love pill*" (IDI-8-female-22). This mutual reinforcement helped overcome common barriers such as forgetfulness, pill fatigue, and lack of motivation.

Maintaining purpose and Motivation.

Some serodiscordants coped by holding onto personal reasons for adherence, such as protecting children or safeguarding their relationship. This sense of purpose provided mental strength to continue adhering to medicine.

> "*Every time I feel like giving up, I start thinking about the reasons why I started it, my child. If I give up and get infected, my children will suffer. That's what keeps me motivated to adhere to PrEP*". (IDI-5-female-28)

Swallow as instructed.

Half of the serodiscordants, strict adherence to health workers' guidance and instructions, including timing and dosage, is seen as a way to minimize side effects and improve outcomes. Discipline and trust in the provider's advice reinforced consistent PrEP use.

> "*Some people get those signs because of taking the drugs inconsistently, but if you take the PrEP very well, it gets used to the body with time and you no longer experience any side effects*" (IDI-13-female-25).

Picking the drugs at a convenient time.

To cope with challenges associated with missed refills due to limited access to health facilities and transport constraints, 6 out of 22 serodiscordants adopted flexible strategies for collecting medication byvisiting clinics whenever they had money for transport rather than waiting for the scheduled refill date. Others coordinated their visits with partners who were collecting ARVs, thereby sharing transport costs and reducing the financial burden.

> "*I usually try to come earlier towards the due date especially when I still have some money. If the card shows 30th, and I have transport on 28th, then I go and pick the drugs at the health centre"*. (IDI-14-male-27)

Discussion

The study explored the lived experiences of PrEP adherence among partners in serodiscordant relationships, highlighting enabling factors, barriers, and coping mechanisms. The findings underscore the complex interplay between individual motivations, relational dynamics, and structural challenges that shape adherence behaviours among clients seeking care in an urban health facility.

The study showed that counselling from health workers emerged as a central enabler of adherence. Serodiscordants consistently emphasized the value of personalized, and empathetic support, including reminders, follow-up calls, and even transport facilitation. Proactive follow-up, open communication and tailored counselling-built trust, reduced fears, and sustained motivation on how participants can navigate the challenges they faced. In an urban context, where health facilities are often characterized by overcrowding, high patient volumes, and limited provider client interaction time, such individualized counselling becomes particularly critical in bridging gaps in routine service delivery. These findings align with studies in Kenya and South Africa, which demonstrate that relationship-sensitive counselling improves PrEP uptake and persistence [27-29]. This implies that there is a need for strengthening HIV prevention guidelines to institutionalize client-centred counselling, while supporting structured follow-up systems and provider training to improve PrEP adherence.

Partner support was another major facilitator, expressed through reminders, joint pill-taking, emotional encouragement, and financial assistance. When PrEP was integrated into shared routines, it became more than a biomedical intervention and was perceived as a relational sacrifice that strengthened bonds and reinforced adherence. More so in this context, where high mobility, busy work schedules, and fragmented social support systems can disrupt continuity of care, partner support appears to function as a stabilizing force that helps maintain continuity of care. Such relational dynamics echo findings from prior research [29-31], which found out how such kind of support plays a pivotal role in improving adherence among PrEP users. This highlights the need to incorporate partner-inclusive approaches within PrEP guidelines, promoting couple-based counselling and support mechanisms that leverage relational dynamics to improve adherence.

Although less frequently discussed, the desire to enjoy condomless sex in a safe context also motivated adherence. Participants described PrEP as a means of reclaiming intimacy without fear of transmission, especially in urban environment where fluid relationships are diverse that encourage condomless intimacy, yet at the same time increase exposure to HIV risk, PrEP is essential for balancing pleasure with protection. A finding supported by studies emphasizing PrEP's role in enhancing both emotional and sexual satisfaction [15, 32, 33]. This implies that HIV prevention policies should ensure that PrEP guidelines and communication strategies address the need for adherence to support safe condomless sex without stigma.

Disclosure and sharing of information further enhanced adherence among participants. Individuals who openly discussed their PrEP use with trusted contacts experienced emotional relief and established supportive networks that motivated them to remain committed. Especially in a setting where disclosure is shaped by the complexity of wider but less stable social networks, where individuals have more people, they could potentially confide in but making decisions around whom to trust is more difficult and potentially discouraging open communication. This resonates with findings from Mozambique and South Africa, where communication within partnerships and communities improved mutual understanding and reinforced adherence behaviours [34-36]. This underscores the need to strengthen policies that promote safe and voluntary disclosure, that build supportive environments for PrEP adherence.

Despite these facilitators, participants faced significant barriers. Structural challenges such as transportation costs and geographical distance hindered timely clinic visits for medication refills and counselling, more so, in situation where transport fare is uncertain. Similar findings have been reported in other African contexts, where long distances and financial constraints disrupt continuity of PrEP among users [13, 37-39]. This calls for a need to strengthen differentiated service delivery models by decentralizing PrEP services and providing transport or community-based access options to reduce financial and geographical barriers to adherence especially in urban areas where there are clients who experience unpredictable transport costs, and congestion, which still disrupt timely clinic visits.

Negative perceptions and myths also affected adherence. Misconceptions that PrEP was equivalent to ARVs, coupled with stigma and fear of judgment, led some serodiscordants to hide medication or avoid taking it publicly. These findings mirror Ugandan studies documenting PrEP-related stigma and misinformation [15, 40] and this is evident in urban settings where clients can access information from anywhere (social media, informal drug sellers, peers) which can create competing and sometimes conflicting narratives about PrEP, ARVs, and HIV prevention, reinforcing misconceptions rather than reducing them. This highlights the urgent need for comprehensive community wide sensitization to improve understanding of PrEP, dispel myths, and foster supportive environments for PrEP.

Despite these barriers, serodiscordants demonstrated resilience through practical and emotional coping strategies that enabled them to remain adherent to PrEP. Taking PrEP with food and water was a widely adopted tactic to manage side effects despite the fact that in urban context consistent access to food is not guaranteed for all urban dwellers, especially in informal settlements. Consistent with evidence from South Africa, Uganda and Zimbabwe showing that clients who adjusted pill-taking routines around meals were more likely to persist [41, 42] PrEP delivery guidelines should include standardized adherence support tools that address side-effect management, ensuring clients are proactively counselled on practical strategies such as taking medication with food and water to improve tolerability and long-term continuation.

Counselling also functioned as a coping tool. Serodiscordants frequently sought reassurance from health workers during moments of doubt, side-effect distress, or stigma-related concerns. This

aligns with findings from the HPTN 082 trial [43]and other studies, which highlight the importance of non-judgmental, supportive environments in sustaining adherence [41, 44-46]

Study strength and limitations

The study engaged real life partners in discordant relationships, providing firsthand insights into adherence experiences, and how urban-specific dynamics such as, high population mobility, socio-economic diversity, time constraints and often congested health service environments, shape adherence which strengthens the authenticity and relevance of the findings. Unlike many adherence studies that focus only on facilitators and barriers, this study uniquely explored coping strategies. By linking lived experiences to the realities of urban health systems, the study generates context-sensitive evidence that can inform more responsive, client-centred PrEP programming and counselling approaches in similar urban settings. However, the findings may not be fully transferable to other health facilities as Kisenyi Health Centre hosts a specialized ART clinic intervention that may provide more structured support than is available in less resourced settings. In addition, the study focused on participants who were adherent to PrEP, thereby excluding the perspectives of the non-adherent individuals whose experiences could have offered valuable insights into barriers and discontinuation.

Conclusion

PrEP adherence was shaped by a complex interplay of psychosocial, relational, and structural factors. Health worker counselling and partner support fostered trust, motivation, and shared responsibility, strengthening adherence behaviours. However, participants faced persistent barriers, including stigma, misinformation, PrEP stockouts, transportation challenges, and long distances to health facilities, which threatened continuity of use. Despite these challenges, participants demonstrated resilience by adopting practical coping strategies such as integrating PrEP into daily routines, coordinating medication schedules with partners, managing side effects, and drawing motivation from personal goals such as preserving relationships and having children. Counselling further reinforced these coping mechanisms by providing ongoing guidance and reassurance

Recommendation

Overall, the findings highlight that HIV guidelines should institutionalize empathetic counselling, with structured follow-up systems to sustain adherence. There is also a need to enhance safe disclosure support and community sensitization to reduce misconceptions about PrEP. Clear guidance on side-effect management to improve tolerability and long-term continuation of PrEP should be standardized within guidelines.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Makerere University School of Public Health Research and Ethics Committee (MakSPH-REC 571). Additional administrative clearance was sought from Kampala Capital City Authority.

Written informed consent was obtained from all participants prior to participation in the study.

Clinical trial number

Not applicable.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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This study did not receive any funding.

Authors' contributions

SN§ conceptualized this study, designed the data collection tools. AK reviewed the data collection tools and participated in data collection and reviewed transcripts SN§ conducted data analysis. SPSK and JNB participated in data interpretation, review of analysis outputs. SN§ drafted the first manuscript, SN reviewed and improved the initial manuscript. JNB and SPSK reviewed and revised the final manuscript. All authors reviewed and approved the final manuscript.

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List of abbreviations

FGD: Focus Group Discussion, HIV: Human Immunodeficiency Virus, IDI**:** In depth Interviews, KII: Key Informant Interviews, PrEP: Pre-exposure prophylaxis,

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