

Peer-led Interventions: Exploring the Peer Group Leader Experience of Delivering a
Mental Health Intervention for Youth Living with HIV in Tanzania

by

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Defense Date: March 20, 2024

Approved:

Dorothy Dow, Supervisor

Joy Noel Baumgartner

Dirk Davis

Thesis submitted in partial fulfillment of the requirements for the
degree of Master of Science in the Duke Global Health Institute in
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ABSTRACT

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Abstract

Background: Youth living with HIV (YLWH) face mental health challenges which negatively influence their adherence to antiretroviral medication and HIV outcomes. In sub-Saharan Africa, where the majority of YLWH reside, there are few mental health professionals. Task-shifting interventions to lay peer leaders may be an effective strategy for addressing mental health challenges. This study aims to understand and evaluate peer group leaders' experiences delivering a peer-led, group-based mental health intervention called The Voice of Youth (Sauti ya Vijana (SYV) in Swahili) to YLWH in Tanzania. Methods: Peer group leaders (PGLs) aged 23 to 29 years and living with HIV were trained to deliver SYV. The study took place at four different sites in Tanzania. In depth interviews (IDIs) were conducted with PGLs after delivering the SYV pilot study. IDIs were audio-recorded in Swahili and translated to English. English transcripts were analyzed using NVivo and Excel was used to further summarize data and identify themes. Results: PGLs expressed a multitude of motivators and perceived benefits in their roles, including a desire to help youth, increased confidence, and a newfound hope for the future. Challenges included concerns about compensation and navigating exposure to difficult life events from the youth that triggers past trauma experience by PGLs. PGLs also shared recommendations for the intervention in terms of expansion and sustainability. Conclusions: Insights from the PGLs can help enhance the SYV PGL experience and position SYV for sustainability as Tanzania navigates scaling mental health care YLWH.

Dedication

I dedicate this paper as a tribute to Dr. William “Jody” Wilkinson and Pastor Ta’Tyana Leonard, whose belief in my potential and encouragement to share my spiritual gifts have been instrumental. A special dedication goes to my cherished Grandma, who, despite our language differences, taught me that love knows no boundaries. Additionally, I dedicate this work to all the gracious individuals in Tanzania who, through their kindness, guided me in opening my mind and heart to new experiences in an unfamiliar land.

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1. Introduction

1.1 Global View of Youth Living with HIV (YLWH)

Globally, the prevalence of human immunodeficiency virus (HIV) remains a pressing public health concern. In 2022, there were 3.2 million youth (15-24 years old) living with HIV (YLWH) and 350,000 new HIV infections occurred in this age group alone (UNAIDS, 2022). In 2019, two out of seven new HIV infections globally were among young people (Joint United Nations Programme on HIV / AIDS, 2021). This issue is especially pressing in sub-Saharan Africa where 85% of adolescents (10-19 years old) who live with HIV reside (UNICEF, 2023).

Young adulthood is a time of significant developmental transition and studies have shown that 62.5% of mental disorders occur before an individual turns 25 years old (Solmi et al., 2022). YLWH face increased mental health challenges compared to their HIV negative peers (Too et al., 2021). This is in part due to YLWH facing HIV-related stigma, discrimination, medication adherence challenges, and learning how to cope with their disease in addition to the many stressors faced by all youth (Dow et al., 2022; Mellins & Malee, 2013). Addressing the mental health needs of YLWH is paramount (World Health Organization, 2023).

1.2 Tanzania:

Tanzania has an annual population growth rate of 3.2% with an expected population of 140 million by 2050 (World Bank, 2023). In 2022, Tanzanian youths (15-24 years of age) made up 19.2% of the population (Ministry of Finance and Planning et al., 2022). Despite the growing number of youth in Tanzania, the youth unemployment rate remains at 4.2% (National Bureau of Statistics Tanzania, 2022). In Tanzania, there are approximately 150,000 YLWH, with young females accounting for 100,000 of them, leading to a significant gender disparity (UNAIDS, 2022). This disparity is evident in

HIV prevalence rates, with young females having a rate of 1.7, nearly twice the rate of young males at 0.9 (UNAIDS, 2022).

1.3 Mental Health among YLWH in Tanzania

Lwidiko et al., 2018 found that the prevalence of depressive symptoms in Tanzanian adolescents living with HIV was five times greater than adolescents matched by age who were HIV-negative signifying the need for increased mental health care among YLWH; however, few interventions exist for YLWH in Tanzania (Dow et al., 2022).

Tanzania's mental health workforce comprises of 1.31 professionals per 100,000 population, whereas in child and adolescent mental health services, this number is 0.22 per 100,000 population (World Health Organization, 2022). During such a crucial point in their life, support from para-professionals can help youth cope with mental health challenges (Willis et al., 2019; World Health Organization, 2023). YLWH need increased mental health resources to improve antiretroviral therapy (ART) adherence and virologic suppression, bolster their social support networks, and navigate life, ultimately empowering them to lead healthier lives (Dow et al., 2022).

1.4 Peer-Led Interventions

Peer-led interventions involve peer group leaders (PGLs) who help deliver interventions to a specific demographic. Peer-led interventions have the potential to help address the shortage of mental health professionals in low and middle income countries and help combat the mental health burden for YLWH (Berg et al., 2021; Denison et al., 2020; Dow et al., 2020; Duby et al., 2021; Giusto et al., 2023; Merrill et al., 2023; Stangl et al., 2021). For youth, PGLs are close in age, uniquely positioned to provide efficient support, and often have similar identities to the youth receiving the intervention, allowing them to relate to the youth on a deeper level than ordinary trained

professionals (Wogrin et al., 2021). PGLs are especially important in contexts like Tanzania as there is a lack of trained mental health professionals, which contributes to decreased access to mental health care and increased mental health needs (Bhana et al., 2021; Joag et al., 2020). There is evidence that peer support among YLWH increases their self-esteem and empowerment to make decisions about their health (United Nations Children's Fund, 2016). Peer group leaders can provide guidance on scenarios they have experienced in the past, which can increase the support participants have when experiencing difficulties (Joung et al., 2020). A study in Zimbabwe utilizing peer counselors found notable improvements in psychological well-being, quality of life, and adherence to ART for adolescents (Willis et al., 2019). Having a safe space for individuals to discuss their HIV status in peer support models is advantageous for YLWH with disclosure challenges. In Tanzania, a study revealed that adolescents tend to mask their HIV status, disclosing to friends and potential partners, or feeling reluctant to disclose to close relationships, emphasizing the crucial need for disclosure education and support (Ramaiya et al., 2016).

There is currently a research gap on whether peer-led interventions for YLWH can be effective at improving mental health and HIV outcomes. Effective supervision is critical to the successful implementation of peer-led interventions. There are some promising results in task sharing mental health interventions with supervised peer supporters for YLWH (Cluver et al., 2022). To enhance the effectiveness of PGLs, it is essential to provide them with training, support, and supervision (Wogrin et al., 2021; World Health Organization, 2021b). A leader's teaching skills for the intervention directly tie into how others will receive the intervention (Hayslip et al., 2015). Delving into the factors influencing the effectiveness of peer-led interventions will contribute valuable insights to the existing literature on the role PGLs play in mental health care for

youth. This, in turn, holds the promise of improving mental health outcomes for YLWH and improving both ART adherence and virological suppression.

The primary objective of this current study is to explore the experiences of PGLs delivering a mental health intervention to YLWH, Sauti ya Vijana (The Voice of Youth, SYV) as part of larger clinical trial examining its effectiveness on HIV-related outcomes in Tanzania (NCT05374109). With this, we will be able to understand the challenges PGLs face and assess factors they view as essential to sustain a peer-led intervention.

2. Methods

2.1 Description of the Peer-led Intervention “Sauti ya Vijana” (The Voice of Youth, SYV)

SYV is a peer-led, group-based mental health intervention for YLWH that aims to help them cope with common stressors and life challenges (see Figure 1 below; Hosaka et al., 2022). It consists of 10 group sessions (2 with caregivers) and 2 individual sessions. With the youth’s consent, caregivers are encouraged to be present for the first and sixth sessions. The first three sessions are designed to encourage youth participants to identify their stressors, worries, identify coping mechanisms, and learn components of cognitive behavioral therapy (CBT) (Cohen & Mannarino, 2022) to identify how their thoughts, feelings, and behaviors are connected. Subsequently, during the fourth session, youth learn about memories, and the concept of the trauma narrative is introduced. In session 4.1, the youth have the opportunity to share their HIV disclosure narrative, what happened before and after they learned their HIV diagnosis, one-on-one with a PGL (1st individual session). In session five, the youth are invited to share a part of their narrative with the group. In session six, the youth share their HIV disclosure narrative with a caregiver or supportive adult who is already aware of their HIV status. Components of Interpersonal Psychotherapy (IPT) (Markowitz & Weissman, 2012; Weissman et al., 2000) is used during session seven to help the youth identify their circles of support to recognize who, if anyone, they trust in their life to turn to for emotional support. Session eight is about recognizing HIV-related stigma and how to cope and reduce stigma. In session nine youth discuss steps to HIV disclosure, including roleplay exercises, topics around sexual reproductive health, and condom demonstrations. Session ten uses components of motivational interviewing (MI) (Miller & Rollnick, 2013) to help youth identify their values and provide them with tools to move forward positively in their lives. The youth participants meet individually with a

PGL to set future goals and reflect on what they've learned during SYV (2nd individual session). At the end of the ten group sessions, there is a final celebration, and certificates are distributed to the participants.

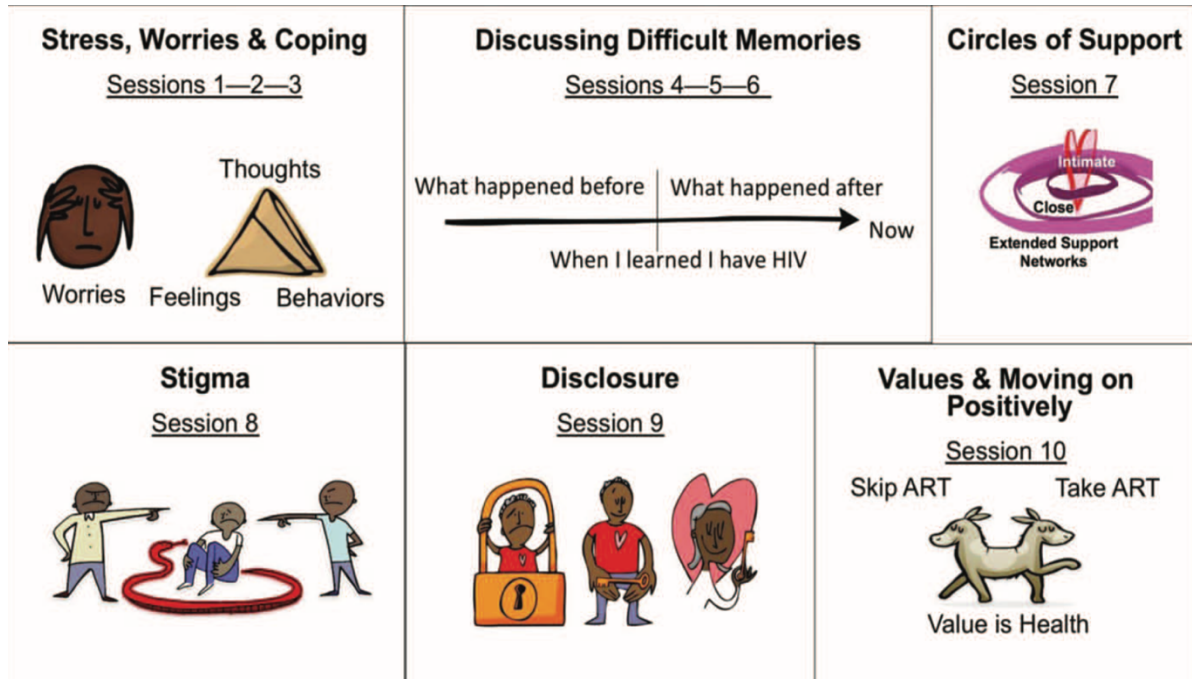


Figure 1: Content of Sauti ya Vijana (SYV)

Sessions 1 and 6 involve caregivers; Two individual sessions (session 4.1 and 10.1) are not shown in this figure.

PGLs were hired to deliver the SYV intervention and participated in an intensive two-week in-person training in Moshi, Tanzania to learn and practice the manualized group sessions. After training concluded in November 2021, the PGL continued practicing with their supervisors during the week and attended weekly supervision meetings. Due to Institutional Review Board (IRB) delays, PGL had a full year of practice prior to the pilot starting in October 2022.

The pilot was conducted from October to December 2022. During each session, one PGL documented intervention fidelity on a fidelity check list and wrote session notes. These notes were reviewed by all the PGLs and submitted to the supervision team for review. Supervision meetings were held on Zoom for each site and included the

PGLs, supervisor, one or two expert group leaders (the original SYV group leaders from 2016-2020 pilot who help train and supervise the new PGLs in this scaled trial), the study coordinator, and the principal investigator. The study coordinator led the supervision meetings and took notes on the session progress, difficulties, and recommendations for the upcoming sessions. SYV supervisors were employed in SYV as a secondary role, with many of the supervisors having primary clinical roles within the HIV clinic. Once a month, an all group leader Zoom meeting was held to review any challenges and receive didactic education on a mental health or research topic.

2.2 Setting

This study took place in Tanzania, a country located in East Africa with an overall HIV prevalence of 4.7% (UNAIDS, 2022). Study locations were chosen based on having a large population of YLWH, high mental health needs, an established adolescent HIV clinic, and space to conduct research. The sites include Moshi, Mwanza, Ifakara, and Mbeya, as shown with local HIV prevalence in Figure 1 (PHIA Project, 2023).

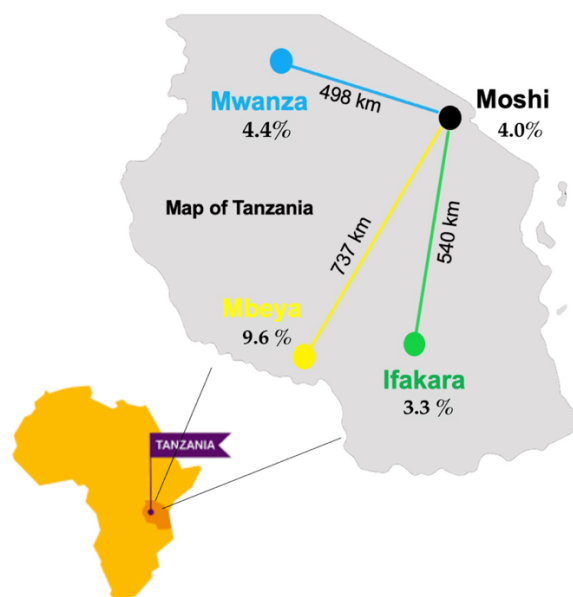


Figure 2: HIV Prevalence in each SYV study region

2.2 Participants

All PGLs involved in the SYV pilot study were invited to participate in this study (n=25). The requirements to be a PGL included being between the ages of 23-29 years at the time of hire, to be living with HIV, and, model good medication adherence (Dow et al., 2020). PGLs who agreed to be study participants themselves were contacted by externally contracted qualitative researchers (not part of regular SYV study team) via phone to schedule a suitable interview time and location. Once this was established, the researchers met with the PGLs, obtained their consent to conduct and record the in-depth interview. No PGL declined to participate.

2.3 Procedures

To ensure PGLs were free to express their true opinions without any influence on their job, their identifying information was kept confidential from the study's principal investigators. Four external qualitative researchers were hired, one at each site, to conduct the interviews, which took place from February 2023 to March 2023, following the completion of the SYV pilot in December 2022. To ensure privacy, the interviews were conducted at a private office or clinic space located on the grounds of the SYV-affiliated hospital for all four locations. A handheld audio recording device was used to record, and the recorded interviews were uploaded to HIPAA-compliant Duke Box. The qualitative researchers also took field notes during the interview and uploaded them using an electronic semi-structured online debriefing form on Duke Box. The in-depth interviews lasted anywhere from 60 minutes to 113 minutes, with an average duration of 74 minutes. PGLs were paid 10,000 Tanzanian Shillings (\$4.50 USD) for their participation in the study.

2.3.1 In-depth Interviews

The in-depth interview (IDI) guide used in this study was informed by the Consolidated Framework for Implementation Research (CFIR) in order to explore and understand the role of PGLs in the implementation of the SYV mental health intervention (Damschroder et al., 2009). The IDI guide was created in accordance with the study objectives of understanding the group leaders' experience as part of SYV and identifying ways to improve SYV in the future. Most of the IDI guide questions fell under the CFIR domains of individuals involved and the inner setting. The constructs under these domains included issues such as identity, motivations, experience as a group leader, group leader training, impact of intervention on PGLs, sustainability, and recommendations. The IDI guide included 32 open-ended questions (See Appendix A).

2.3.2 Demographic Surveys

A detailed demographic survey was given to PGLs to collect information on sex, age, marital status, whether they have children, other work (beyond SYV), location of other work, education level, and religion. This information was collected at an all SYV in-person training January 2024 and inputted into RedCap for storage and analysis.

2.4 Data Analysis

The IDI audio recordings were simultaneously translated and transcribed from Swahili to English. Each transcript was uploaded into HIPPA-compliant Duke Box and then imported into NVivo 12. A codebook was developed, consisting of 28 deductive codes derived from the IDI guide plus one emergent code (economics).

The first author (CA), based in the U.S., coded all 25 transcripts. To ensure the qualitative analysis was contextually grounded, a second Tanzanian qualitative researcher double-coded eight transcripts, two transcripts from each site, aiming to

identity a similar interpretation of codes (Campbell et al., 2013). No additional codes were identified during this process (Campbell et al., 2013).

Thematic analysis followed a process of coding, reading coding reports, and creating an Excel matrix for data reduction and visualization purposes (Braun & Clarke, 2006; Tolley, 2016). In addition, a summary document was created where each code had brief highlights of the responses. From this process, the first author coder was able to identify common themes and relevant quotes. The final compilation of themes was then presented to the study team for discussion at the in-person meeting January 2024 for any feedback from PGLs. Previous studies indicate our sample size (n=25) was more than sufficient for reaching data saturation (Guest et al., 2006; Hennink et al., 2017).

2.5 Ethical Considerations

Written informed consent was obtained from all PGLs. Ethical approvals were received by all IRBs including Duke University (Pro00109309), Kilimanjaro Christian Medical Centre (#2542), Ifakara Health Institute (IHI/IRB/EXT/No: 33-2023), Baylor Center of Excellence in Mbeya (SZEC-2439/R.E./V.1/27), and the Baylor Center of Excellence in Mwanza defers to the National Institute of Medical Research (NIMR/HQ/R.8c/Vol.I/2358).

3. Results

3.1 Description of PGLs

All twenty-five PGLs consented to participation in the in-depth interviews. The ages of the PGL study participants at the time of interview ranged from 23 to 31 years old, with a median age of 26. The PGLs consisted of 12 women and 13 men, with seven at the Moshi site and six at the remaining sites, Ifakara, Mbeya, and Mwanza. Among them, 16 PGLs had children. All PGLs had completed at least primary education, with 14 completing secondary education and 8 having higher education. Outside of SYV, 13 PGLs had second jobs. Additional participant demographics can be found in (Appendix A).

3.2 Motivators and Perceived Benefits of the PGL role

Desire to help youth

A few PGLs had personal experiences with childhood peers who lost their lives to HIV, a driving force behind their decision to apply for the role. Due to their personal experiences, many expressed a general desire to help, with personal goals of youth empowerment. Additionally, PGLs relayed their interest in helping YLWH in managing depressive symptoms:

“I have seen many youth are going through depression and they don’t have people to help them, and they are not aware of who they should take their problems to for help.

Therefore, now as a group leader, I tell the youth which ways or methods they can use to get help now and in the future.” (Female PGL)

Throughout the intervention, the significance of providing a safe space for youth to express emotions became apparent to many PGLs. By providing this safe space, they were able to witness the youth’s growth at the start and end of the intervention, evidenced by the youth participants knowledge and enthusiastic passion towards

learning after each SYV session. Furthermore, PGLs valued their sincere interest to help youth and establish a heartfelt connection to support youth to give them hope for the future:

“I have a goal of teaching youth to understand about their general health. That living with [HIV] infection is not the end of life, you can have infection and have a family that is uninfected and live a good life like others.” (Male PGL)

Confidence

PGLs reported increased personal and work-related confidence attributing it to training, practice, and interactions with youth and coworkers. At the beginning of the intervention, a few PGLs stated that they did not feel confident prior to training. However, noticeable improvements in teaching skills, education, and passion for their role became apparent as confidence increased. As PGLs gained confidence, a few applied their acquired skills to their daily lives. For example, one PGL often dealt with angry youth at the HIV care and treatment clinic (CTC) used their leadership skills to de-escalate the situation. Several PGLs reported feeling respected in their communities, and a few even initiated educational groups in their local communities. PGLs noted the intervention’s transformative impact on their personal lives, with a few PGLs shifting from having feelings of isolation and loneliness prior to undertaking the PGL role. For these individuals, the PGL role cultivated newfound confidence and self-expression. The shared experience of living with HIV provided reassurance, as PGLs found comfort in the knowledge that both their colleagues and participants of the intervention had also faced similar life challenges and events:

“At the beginning I felt despair because I was living with HIV infection, but when I got the opportunity to be with my fellow youth back there...it helped me ... to believe that I am not alone...” (Male PGL)

Shared benefit with Youth

Some PGLs experienced a shared benefit while delivering the mental health intervention to the youth. Delivering the intervention became an empowering experience for PGLs, as they taught and interacted with youth and observed transformations in the youth's behavior. One PGL emphasized the importance of reminding youth that living with HIV does not hinder one from being successful or setting long-term goals for their life. By instilling these values, youth were able to recognize one's own value is crucial for accomplishing personal objectives. Observing the impact of SYV on the youth helped PGLs understand how influential their work was. The process of developing new skills and earning a salary further motivated PGLs to plan for their future. For instance, two PGLs shared how working with SYV helped them shape their life plans:

"Five years from now, I would like my life to have light. Even the person who sees me at that time will say, "Mmm!" Indeed, God exists. I want to have a good life where I am sure of my place to live; I want to have my own transportation; I wish to have my own marriage; and I have various ambitions..." (Female PGL)

During training, several PGLs found the connection between thoughts, emotions, and behaviors in CBT and the triangle [SYV sessions 1-3] beneficial in their personal lives. These sessions became valuable resources that many PGLs shared with close friends and family during conflict. Training and delivering sessions also had a positive impact on personal social support, particularly regarding disclosure, trust, and community [SYV Session 7-9]. These sessions helped PGLs accept their own situation by learning about stigma and identifying support networks in their lives. Simultaneously, a few PGLs acknowledged the necessity of prioritizing their mental health as they continued to discover the benefits of the intervention:

"Since I became a leader, I have become more compassionate and now I know a lot about

mental health—it's something that helps me to cope with the environment at work, at home, and my life in general.” (Male PGL)

Collaborative relationship with colleagues

The role of a PGL cultivated an environment that fostered collaborative relationships. Many of the PGLs worked well with their other PGL colleagues and viewed their relationships as a benefit of the role. The newfound relationships allowed them to forge new friendships, build a support system, and experience a family-like environment. A few PGLs even mentioned that before assuming their roles, they were very shy and had difficulty interacting with others:

“I used to isolate myself...my life would be confined indoors. I mean, I didn't have those friends, I didn't know how to visit people or socialize in groups, I simply couldn't do it at all. So, this has helped me to interact with people. At least now I can even have a little conversation.” (Female PGL)

3.3 Challenges faced during the PGL role

Compensation

PGLs frequently proposed raising the salary for their role, highlighting the financial challenges some faced in managing their current compensation. For example, one PGL suggested additional compensation for working outside of regular hours, such as visiting youth on weekends. One PGL reported hearing that other sites receive slightly higher pay, and that every site has its unique breakdown of payments. PGLs, acknowledging their dedication to ensuring youths comprehended the sessions, advocated for a higher salary. Furthermore, a PGL emphasized the elevated cost of living in Tanzania was high, noting that employees struggled to meet their expenses in the middle of the month:

“At the middle of the month...when we are broke and when all the employees are crying that we don't have money, it will give you motivation because sometimes when we are

broke, we lose moral ...you find that you have nothing and you have long days to go..."

(Male PGL)

SYV Sessions Emotional Impact

Five PGLs shared their reflections on being reminded of past painful memories, an experience that led to secondary trauma. While training sessions proved fulfilling for many PGLs, handling the negative aspects of the sessions emerged as a significant challenge. One PGL expressed the emotional toll, stating:

"Hearing their stories can be painful in a way, but it also pushes me to find an angle that I can use personally to calm myself down. I wonder who I can talk to in order to ease the feelings that I will be carrying, and how I can show that I have been affected by the young person's problem, but it's me who is supposed to help them return to a normal mood."

(Male PGL)

During training, all PGLs were given the opportunity to discuss their own narrative of their journey with HIV to fellow leaders. The PGLs demonstrated a high level self-awareness and were able to identify the unintended emotional challenges that arose during the sessions for them because of revisiting their past experiences.

Social Dynamics between PGLs

Our research findings revealed that, despite developing connections with colleagues, several PGLs at three SYV sites encountered negative social dynamics. These encompassed gossiping, a sense of being underestimated, productivity issues, arrogance, and lack of cooperation from coworkers. For example, one PGL voiced frustration about issues being escalated instead of being resolved among themselves:

"One thing that I really dislike is the habit of arrogance among us. You find someone acting knowledgeable, thinking they know everything, but they can't humble themselves.

And the habit of gossiping and backbiting among leaders." (Female PGL)

Limitations of Role

Maintaining boundaries with youth was a challenge for PGLs. While youth were very forthcoming with their problems, the PGLs were unable to solve them all due to role limitations:

“Ok, the challenges of youth--when they have brought, maybe, complaints, and they need help, you may find that challenge, as a leader, is beyond my power. This is the challenge which as a leader makes you see that the work is so difficult.” (Female PGL)

The tasks and responsibilities of PGLs could be time consuming. One PGL stated that the role left them less time to spend with their children while at work on the weekends. A recognized limitation of the role for PGL was the recognition of the small number of PGLs at the site. When delegating tasks, responsibilities increased due the limited number of staff to lead a group of youth.

“The worries which I have are the small number of group leaders.... because there are tasks of collecting information, writing and reading, and now, who will be reading, observing the youths, and taking the information from the youths... There will be many things to do for one person to lead twelve people or ten people it is difficult.” (Female PGL)

Inclusivity and Collaboration

PGLs discussed the challenge of not being able to hold physical meetings with other PGLs due to the intervention taking place at four different sites. For that reason, it was suggested to arrange in-person meetings to talk through their experiences, challenges, and foster learning with PGLs from all sites:

“ ... We asked if we could meet with people from all the sites and be able to share the challenges that they have been going through and in what way they have been able to solve those challenges so that we get more understanding, because when you meet in one place and share with each other how to solve problems at least it sticks in the head quickly” (Male PGL)

Outward Perceptions

Diverse perceptions of the PGL role emerged from individuals outside of the intervention. One PGL noted that some individuals assumed mental health issues in the PGL due to their involvement in a mental health intervention. Another PGL shared the experience of losing close friendships due to work commitments:

“Well, before, I had friends with the same status as mine. Since I am now spending most of my time here, that means I am not seeing them often, so it is like they don’t want to be with me anymore, but I also have new friends here--I mean my fellow group leaders. And when they [old friends] post their Whatsapp status it is like they are cutting me off, they are on their own, they don’t want to post me, but it is okay” (Female PGL)

One PGL mentioned that their job caused relatives to perceive them as overly proud due to the PGL having less time to visit them. Another found themselves feeling excluded due to their friends treating them differently while one PGL discovered instances of gossip circulating within their neighborhood:

“Ah, some people in the neighborhood are speaking very negatively about me [his HIV status], especially those who come to this clinic. Whenever they come here, they see me around this clinic area...Some have even started spreading rumors in the community that I am not who they think I am. Because of this, I also feel very uncomfortable. However, based on the training I have received... I am trying to confront these negative feelings by using the techniques I’ve learned” (Male PGL)

Teaching Competence and Supervision

PGLs faced challenges regarding how the youth perceived their teaching abilities. Many voiced concerns that their inability to provide precise answers to questions might lead youth to question their knowledge. Moreover, a few PGL felt anxious about whether youth truly understood their teachings.

Another challenge for PGLs was the limited physical presence of supervisors. SYV supervision calls typically occur through video calls, and one PGL expressed reservations about openly discussing certain challenges in the presence of other PGLs. *“Yes, how can I say it on the call like we had a fight yesterday... Yes, we are all there, how do you think he will feel?”* (Male PGL). During supervision, PGLs are encouraged to address any issues that arose during sessions. One PGL recommended that colleagues from different sites should bring up issues earlier, rather than waiting to discuss them during these meetings.

3.4 Sustainability of Intervention and PGL role

Goal of the program

When asked about the goal of the intervention, PGLs emphasized its purpose: to help youth open up about their lives. PGLs observed the impact the intervention had on the youth, and parents were appreciative of its influence on their relationships with their children. Many PGLs aimed to ensure the youth did not leave the intervention in the same state as when they came in:

“As a leader of the group, what is important...is to ensure that those youth who are chosen to participate in SYV do not leave as they came and leave with something in their head, mostly they change completely, what we are going to teach them stays in their heads and they are able to implement and work on it. That is very important” (Male PGL)

Career Advancement

PGLs were concerned about their future after the intervention concludes. When asked about their desired duration as PGLs, many expressed wanting to continue for as long as possible or until the project concludes. Specifically, many were apprehensive about aging out of the peer group leader role:

“My concern is about what I shall do after the end of this position as a leader, what am I going to do. Ehh, where am I going to get a job or in which situation am I going to be? That is the concern which I have right now” (Male PGL)

Other PGLs were preoccupied with their aspirations to advance their career and secure higher-level positions in the future.

3.5 Feedback and Recommendations

PGLs all provided feedback to enhance the intervention for the future. The feedback included key group leader qualities: being a good leader, compassionate, cooperative, a problem solver, and having public speaking skills. PGLs also mentioned the importance of cross-site collaboration to share challenges and learn from others. Other recommendations included incorporating extra sessions for youth, increasing the frequency of in-person supervision meetings, and providing additional work computers. Moreover, a few PGLs suggested extending the duration of supervision meetings and introducing an in-person meeting with all supervisors to make these calls more beneficial:

“... Well, these calls are good (hesitates) they are doing good though I can suggest that (short pauses) it would be better if those supervisors would be coming here physically more often to see things from the base... because if you aren't at the base (hesitates) I mean how sure are you that we have done what we have documented?” (Male PGL)

A few PGLs strongly advocated for mixing girls and boys during youth sessions, emphasizing the potential for mutual learning to enhance the overall learning experience. One PGL proposed increasing the maximum age for youth participants would allow the intervention to reach a wider audience. The majority of PGLs also expressed that a salary increase would boost their motivation to work and provide crucial providing financial support to their families: *“...because prices of things in the*

markets have increased too. And if you look... prices have gone high and the business we depend on does not go well" (Female PGL).

Intervention Expansion

PGLs expressed an interest in broadening the reach and impact of the SYV intervention. To achieve this, a few PGLs recommended increasing the number of group leaders, utilizing radio or television for educational outreach, exploring schools for recruitment and session delivery, and extending teaching roles to different areas in Tanzania. One PGL articulated this aspiration by showing interest in helping youth nationwide with the intervention:

"I want to teach about mental health in the whole Tanzania in order to help youths. To spread SYV in all parts of Tanzania to reduce deaths, the deaths of children, who are stigmatized, those who do not take medications effectively, and the youths who get challenges" (Male PGL)

Training

Some PGL proposed additional training in counseling and psychology, along with periodic refresher sessions for group leaders to better equip them to deliver the intervention in the future. One suggestion involved incorporating an extra training session annually, while another PGL recommended distributing tests to assess PGLs comprehension of various topics. Another recommendation involved having expert group leaders observe PGLs practicing with the youth at each site:

"I wish if the expert group leaders would come to see how we are practicing with the youth, because they only saw us practicing during training. You know during training we made so many mistakes because we just started, but after practicing we were okay, so I wish if the expert group leaders would visit us at our sites to see how we have improved" (Female PGL)

The qualitative findings offer a diverse perspective on the task sharing experience for PGLs. They encapsulate perceived benefits, acknowledge challenges, and provide valuable recommendations for the intervention.

4. Discussion

This research study aimed to explore the experiences of PGLs delivering a mental health intervention to YLWH. Our investigation revealed numerous motivators driving PGLs to participate in the intervention. The insights shared by PGLs highlight various aspects that contribute to the lay worker experience of delivering a manualized mental health intervention. Currently, there are limited studies on peer led mental health interventions for youth in Africa (Denison et al., 2020; Dow et al., 2020; Duby et al., 2021; France et al., 2023; Im et al., 2018; Osborn et al., 2020; Simms et al., 2022), with only a few being delivered to YLWH in Africa (Denison et al., 2020; Dow et al., 2020; France et al., 2023; Hosaka et al., 2021; Simms et al., 2022; Wogrin et al., 2021).

The exploration of motivators for the PGL role shed light on the various experiences of each PGL. The strong desire among PGLs to impact the lives of youth emerged as a motivator for becoming a group leader. Studies have found that holding a role that has a positive impact on youth is fulfilling for PGLs (Bernays et al., 2020). This was not just seen with the youth, PGLs also expressed interest in supporting their peers outside of the intervention (France et al., 2023). Delving deeper, personal connections to the role emerged as a motivator. For instance, one PGL shared how the experience of losing peers in their life motivated them to apply to the role, emphasizing the impact personal connections can have on career choices (Mark et al., 2019; Wogrin et al., 2021). These past experiences helped PGLs have traits that aligned with the local context which served as a facilitator to intervention delivery (Le et al., 2022).

The shared benefit PGLs had while delivering SYV served as a motivator and benefit of their job. PGLs gave youth a safe space to discuss their challenges, which affected how the intervention was received and delivered. A 2022 systematic review found that one key facilitator for success in delivering a mental health intervention lies in lay providers' connection to the intervention, including positive attitudes, beliefs,

behaviors, and intentions (Le et al., 2022). Establishing relationships with their colleagues also played a crucial role, enabling PGLs to find a community with similar lifestyles. This support network helped many of them cope with feelings of loneliness, particularly before starting the role. In addition to forming support networks, the skills gained by PGLs in Project YES! and the Wakakosha peer-led intervention allowed them to set personal and professional goals for the future (Burke et al., 2022; France et al., 2023).

While the delivery of the intervention to YLWH was personally rewarding, various barriers existed. The PGL role, serving as a newfound source of income for many, posed challenges in terms of compensation. This was due to rising economic costs, funding future career plans, and being responsible for providing for themselves and their families. Another study found that a few peer leaders contemplated quitting their roles to take up work with better pay due to their need to support their dependents (Bernays et al., 2020). It's important to note that the SYV role is a part-time role, taking place three days a week, mainly on weekends, and provides health insurance coverage for both PGLs and their families. The four sites pay according to the unique institutional local wage, and not all sites share the same cost of living. An important factor to consider is standardizing wages across sites or adjusting salaries based on site-specific cost of living and promoting salary transparency across all sites.

The navigation of emotional discomfort emerged as a challenge for the PGL while discussing their personal narratives during SYV training. Similarly, one study found that the PGL role often led to stress due to the painful experiences shared by youths, which in turn required the PGLs to identify coping strategies for themselves (Wogrin et al., 2021). During training, PGLs delivered the sessions among themselves, emulating the youth participant experience. This process led them to revisit painful memories, including discussions about their own HIV diagnoses [SYV Sessions 4-6].

Studies have shown that mentorship plays a crucial role in helping individuals deal with the stress of complex cases and stories (Bernays et al., 2020). In SYV, the supervisors and their fellow PGLs helped provide this support and future scale up should emphasize mentorship and other support systems for PGLs to mitigate emotional discomfort caused by providing support to YLWH.

Support systems are essential to avoid burnout and stressors for PGLs (Le et al., 2022; Mark et al., 2019). While delivering the PGL intervention, many PGLs encountered challenges related to youth issues outside of the boundaries of their training and role limitations. The unique connections formed with the youth posed difficulties when PGLs needed to maintain boundaries. Recognizing the need for supervision is essential in preparing PGLs to navigate such issues in the future. While the PGL role is successful at helping youth deal with their challenges, it introduces a dynamic that blurs the line between being an educator and a friend. Several studies have explored similar themes where PGLs were not trained to deal with complex issues youth may face without reporting it to a supervisor (Denison et al., 2020; Wogrin et al., 2021).

PGLs play a crucial role in supporting YLWH; however, they require critical support due to staff size, workload, and difficulties arising from delivering sessions and coping with painful memories (Bernays et al., 2020). As interventions conclude, PGLs face concerns about their career trajectory, given the short term nature of these interventions (Olaniran et al., 2022) To address this challenge, studies suggest PGLs take on other roles in the clinic (Joung et al., 2020). Another study found that lay workers expressed dissatisfaction with their high workload and relatively small salary, advocating for pay be comparable to that of other health professionals (Olaniran et al., 2022). Given the unique lived experiences that PGL bring to their roles, it is essential that their compensation reflects this.

To ensure that PGLs are valued and that concerns about job security and inadequate compensation are addressed, it is essential to formalize their role within the healthcare system. The Tanzanian Ministry of Health can take the lead in this initiative by establishing a national program dedicated to the mental health of youth (World Health Organization, 2022). This recognition will not only add credibility to the PGL role, but also create opportunities for a broader range of roles in the current healthcare system, ultimately contributing to the retention of the mental health workforce (World Health Organization, 2021a). To ensure a comprehensive approach, policy makers can synthesize research to form policies that translate mental health interventions into regionally run services in Tanzania (World Health Organization, 2021a). Additionally, collaboration with local leaders and stakeholders will help forge long-term partnerships and foster the effective implementation of interventions.

The age requirement for PGLs, between 23-29 years old, poses a challenge for leaders who age out of their role. The sustainability of the intervention depends on the transferability of the PGL skills to new PGLs. Aging out may result in the intervention losing experienced individuals who have developed deep relationships with youth participants. As older PGLs exit the intervention, new PGLs will have to be trained, prepared for their new job, and paid. This transition may result in the discontinuation of mentorship and support for the youth by the previous cohort of PGLs, as they move into roles that do not directly involve delivering the intervention. Preparing new PGLs will require extensive training and practice. Assigning former PGLs as trainers and supervisors for new PGLs, acting as 'expert PGLs' can alleviate the difficulties of transferring knowledge.

All participants provided feedback and recommendations to enhance the intervention in the future. We discovered that PGLs emphasized the importance of certain qualities such as compassion, leadership skills, and problem solving in future

PGLs to ensure the success of the intervention. Although participants had supervision sessions with all group leaders attending in person the local supervisors would sometimes join virtually, along with the expert group leader and expert supervisors who were often in other cities. The PGLs suggested incorporating a supervision model where local supervisors are required to be present in person would be more valuable. PGLs did not specify which supervisors should attend in person; however, occasional visits from expert supervisors could be helpful. Providing a dedicated space for discussion, supportive supervision becomes instrumental in addressing any challenges faced by PGLs. (Cluver et al., 2022; Mark et al., 2019; Wogrin et al., 2021; World Health Organization, 2021b).

This study contributes valuable insights to the current body of literature by offering insights into the firsthand experiences of PGLs engaged in task-sharing mental health interventions in Tanzania. Through in-depth interviews, our research provides a unique perspective on the motivators, challenges, and recommendations from the PGLs themselves. These perspectives can be integrated into the design of future mental health interventions for YLWH.

4.1 Study strengths and limitations

The strengths of the present study include the sample and study design. The PGLs, living with HIV, offer a unique perspective, understanding the uniqueness of what YLWH face. The utilization of in-depth interviews captured the authentic stories of PGLs, allowing PGLs to share their experiences freely due to the open-ended nature of the questions.

However, several limitations could have impacted the study results. PGLs were employees of the study and to reduce bias the qualitative interviewers were external to the project and study principal investigators remained blinded to information coming from an individual or site. Nonetheless, it is essential to consider the possibility of social

desirability bias influencing PGLs responses. PGLs may have been influenced by concerns about job security or the confidentiality of their answers. The gap between the intervention training in October 2021 and the interviews conducted in February and March 2023 is a crucial factor. This gap may introduce the potential for recall bias among PGLs, as they may have forgotten exact details due to their extended practice time. The close relationships among PGLs raises the possibility of them discussing interview responses with each other, which may influence the consistency of their answers. Although we believe our findings are transferable to similar settings in East Africa, they may not be transferable to different populations or settings.

4.2 Implications for policy and practice

As mental health interventions and programs in sub-Saharan increasingly rely on task-sharing and lay providers to meet mental health service goals, a more thorough understanding of the experiences of lay providers is critical when positioning for scale-up (Shahmalak et al., 2019; Wall et al., 2020). Our research highlights the importance of the PGL role when delivering mental health interventions to YLWH. To enhance the impact of these interventions, programs should create structured training programs, include in-person supervision, offer competitive salary packages reflecting the cost of living, and provide career advancement opportunities for PGLs. These changes can inform the development of future training programs for PGLs. Incorporating feedback from PGLs is essential to tailor interventions to meet their intended audience. Global health organizations and policy makers must acknowledge and address mental health challenges unique to YLWH for their well-being (Mark et al., 2019). Dialogues with relevant stakeholders are necessary to put mental health back on the agenda. Despite having a standalone law for mental health in Tanzania, the absence of specific policies or plans for adolescents, highlights a critical gap (World Health Organization, 2022). Existing mental health policies should incorporate mental health components,

recognizing the intersection of HIV status and mental well-being. The findings obtained from this study can contribute to the advancement of mental health services nationwide.

4.3 Implications for further research

This study contributes to the growing body of evidence that supports task-sharing mental health interventions across different contexts using PGLs. The findings not only add to the vast knowledge derived from PGLs perspectives but also highlight areas for further exploration. Future research can focus on introducing a rotation cohort of PGLs and implementing referral systems to sustain the PGL role. To increase the applicability of these findings beyond the Tanzanian context, researchers should compare PGL experiences in different cultures. The sample in this study was Tanzanian, and cultural factors may influence how others deliver the intervention in diverse contexts (Le et al., 2022). PGLs, by offering unique insights into the specific needs and concerns of both their role and the YLWH they teach, can help tailor interventions.

5. Conclusion

The experiences of the PGLs delivering a mental health intervention to YLWH illustrate the impact of their work on both the youth and their own lives. In settings with limited resources, successful peer-led interventions can help bridge gaps in mental health professional availability. Considering the factors highlighted by PGLs can help enhance the SYV PGL experience and position SYV for sustainability as Tanzania navigates scaling mental health care for YLWH.

Appendix A

Table 1: *Description of the 25 PGLs*

Variable	N	Percentage
Age (at time of interview in 2023)*		
Mean (range)	26 (23-31)	
Gender		
Female	12	48%
Male	13	52%
Marital Status		
Single	6	24%
In a relationship	13	52%
Married	6	24%
Has Children		
Yes	16	64%
Secondary Job		
Yes	11	44%
Education Level		
Primary education	3	12%
Secondary education (Form 1-4)	14	56%
Higher education	8	32%
Type of Higher Education		
College/Vocational	5	20%
University	3	12%
Religion		
Christian	20	80%
Muslim	5	20%

Note. $N = 25$. PGLs were hired in 2021. Interviews took place approximately 2 years later.

Appendix B

In-Depth Interviews Question Guide

1. Interviewer name	
2. Participant ID#	
3. Interview date (dd/mm/yyyy)	__ __ / __ __ / __ __ __ __
4. Participant Age	
5. Participant Gender	
6. Participant agrees to digitally record interview	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Time interview began (hh:mm)	__ __ : __ __ am/pm
8. Time interview ended (hh:mm)	__ __ : __ __ am/pm

<p>Step 1: Complete Q1—3 above before starting the interview.</p> <p>Step 2: Introduce yourself at the beginning of the interview.</p> <p>Step 3: Thank participant for taking part in the interview.</p> <p>Step 4: Read Section 1: Information about the study to the participant.</p> <p>Step 5: Ask for the participant’s permission to record the interview. Tick appropriate box in Q6 above.</p> <p>Step 6: Turn on audio recorder if permitted. Document time interview begins in Q7 above.</p> <p>Step 7: Conduct interview.</p> <p>Step 8: Thank the participant at the end of the interview. Ask if has any</p>
Section 1: Information about the study

The goal of this interview is to learn about your experience as a group leader in the SYV program and to find out if there are ways to improve the program in the future.

There are no right or wrong answers to the questions I’ll ask, only opinions. Please feel free to share your candid thoughts. You are the expert here, and there is no one else we can ask to get the unique information that you can tell me about your beliefs and experiences.

If you agree, I would like to audio record the interview because I want to make sure I don't miss any of your comments. If you don't want the interview audio recorded, I will take detailed notes during the interview instead. The recording will eventually be destroyed after we publish the study's findings.

Please know that participating in this interview is voluntary. You can choose not to answer a question or you can stop participating at any time.

You will receive 7,500 TSH for taking part in the interview. The interview will take about an hour to an hour and a half.

Do you have any questions for me so far about the interview?

[If yes, answer the participant's questions.]

Are you okay with our conversation being audio recorded?

[If yes, begin audio recording now.]

[If no] That's okay, I'll take detailed notes as we talk.

OK -- Let's get started!

Section 2: Identify

Interviewer script: I'd like to start by learning a little about you, how you view yourself, and your goals for the future.

1. *[Individual: Other personal attributes]* To start, please tell me about yourself?
 - a. How do you think other people would describe you?
2. *[Individual: Other personal attributes]* When you encounter a problem, what do you normally do?
3. *[Individual: Other personal attributes]* Who, if anyone, do you reach out to if you need support or advice in your life?
 - a. Why do you reach out to that person?
 - b. What type of support or advice does that person usually provide?
4. *[Individual: Other personal attributes]* What do you want your life to be like 5 years from now? *[PROBE: about family, career, relationships]*

Section 3: Motivations

Interviewer script: Now I'd like to ask you about your decision to become a Group Leader.

5. Do you work at the clinic outside of your role as a group leader in the SYV program?

- a. [IF YES] What is your role in the clinic?
 - b. What are your responsibilities in that role?
 - c. How long have you served in that role?
6. *[Individual: Other personal attributes]* Why did you decide to become a group leader?
- a. What were the main reasons you wanted to become involved?
7. *[Inner: Readiness for implementation]* What steps did you do to become a group leader, such as being hired and trained?
8. *[Individual: Knowledge & beliefs about the intervention]* What did you know about the intervention before becoming a group leader?
9. *[Individual: Knowledge & beliefs about the intervention]* When you first learned of the intervention, what did you think?
- a. How have these impressions changed, if at all, since becoming a group leader?

Section 4: Role expectations

10. *[Inner: Readiness for implementation]* What concerns do you have, if any, about being a group leader?
11. *[Inner: Implementation climate]* What have been your goals as a group leader?
12. *[Individual: Self-efficacy]* Do you expect the workload as a group leader to be difficult or easy to manage?
- a. What makes you feel that way?
13. *[Individual: Knowledge & beliefs about the intervention]* What do you expect will be the primary things that you do as a group leader?

Section 5: Experience as a group leader

Interviewer script: Let's now talk about your experience as a Group Leader.

14. *[Individual: Knowledge & beliefs about the intervention]* How would you describe your group leader role to others?
15. *[Individual: Other personal attributes]* How long do you plan on being a group leader?
- a. Why do you feel like you want to remain a group leader for that long?
16. *[Individual: Other personal attributes]* What has been your personal experience as a group leader so far?
- a. What does it mean to you to be a group leader?
 - b. What do you think are the desired qualities of a group leader?

17. What do you enjoy the most about being a group leader?
 - a. What do you like the least about being a group leader?
18. *[Inner: Networks & communications]* What are your relationships like with other group leaders?
19. How has being a group leader affected your life?
 - a. How has it affected your relationships outside of work?
20. *[Inner: Implementation climate]* What kinds of incentives are there for group leaders to help ensure that the implementation of the SYV program is successful? *[Probe about both financial and non-financial incentives.]*
 - a. In your opinion, are these incentives enough?
 - i. What makes you feel that way?
 - b. What other types of incentives would encourage group leaders to ensure the program is successful?
21. *[Inner: Readiness for implementation]* What do you think you need to be best supported as a group leader?
 - a. Are there areas where you want more support?

Interviewer script: Now let's talk about the training you received to be a Group Leader.

22. *[Inner: Readiness for implementation]* How did trainings prepare you for your role?
 - a. What aspects of the training did you find most helpful?
 - b. How could training be improved?
23. *[Inner: Readiness for implementation]* At the start of being a group leader, did you feel prepared to take on the responsibilities associated with being a group leader?
 - a. How has this changed, if at all?
24. *[Individual: Self-efficacy]* If participants have questions, how confident do you feel you will be to answer them?
 - a. *[IF NOT VERY CONFIDENT]* What would make you feel more confident?
25. *[Inner: Networks & communications]* How did you find the supervision meetings?
 - a. What would make supervision more useful?
 - b. Did you feel you were able to ask questions?
 - i. What makes you feel that way?
 - c. How comfortable do you feel you will be to honestly report challenges you experience during sessions?

Section 6: Impact of intervention on participants

Interviewer script: Now, I'd like to hear from you your thoughts about the affect the SYV program may have on young people living with HIV.

26. *[Individual: Knowledge & beliefs about the intervention]* In your own words, what is the purpose of the intervention?
 - a. What can you tell me about the structure and content of the intervention?

27. *[Inner: Implementation climate]* What do you think are the expectations of the young people with whom you work regarding being in the SYV intervention study?
- a. Do you feel like you and the program meets those expectations?
 - i. Why or why not?
28. *[Inner: Tension for Change]* How do you think the intervention can better reach adolescents and young people who would benefit from it?

Section 7: Sustainability

Interviewer script: Let's now talk about how the program and lesson learned in the program can be sustained.

29. What does sustainability mean to you?
- a. What do you think are important factors in sustaining an intervention like SYV?
30. *[Inner: Structural characteristics]* How would this intervention need to change in your opinion to be implemented at other clinics in your country?

Section 8: Recommendations

Interviewer script: To wrap up, I'd like to hear about how we could potentially improve the SYV program.

31. *[Inner: Structural characteristics]* How could the intervention be changed to best support youth participants?
- a. *[Acknowledge any changes mentioned earlier in the interview and probe further by asking...]* How else could the intervention be changed to better support Group Leaders?
 - b. Is there anything else about the intervention you would change?
 - i. *[IF YES]* What about the intervention would you change?
 - ii. What makes you feel that way?

Section 9: Interview Closing

We are nearing the end of our conversation today.

32. Before we end, is there any other information you'd like to share about your experience as a Group Leader in the SYV program?

I want to sincerely thank you for your time and for the helpful information that you provided.

Section 10: Surveys

Interviewer script: I would like to finish our conversation today by asking you a few final survey questions.

[Ask each of the survey questions and mark the participants' response in the table below. Do NOT turn off the recorder yet (if audio recording).]

Coping Self-Efficacy Scale

Interviewer script: I'll now be asking you some questions about when things aren't going well for you, or when you're having problems. I would like to know how confident or certain you are that you can do the following things. As you think of your answer, please let me know how confident or certain you are using the following rating scale: Cannot do at all, Moderately certain can do, Certain can do.

Q1. Sort out what can be changed, and what cannot be changed	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q2. Get emotional support from friends and family	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q3. Find solutions to your most difficult problems	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q4. Break an upsetting problem down into smaller parts	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q5. Leave options open when things get stressful	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2

Q6. Make a plan of action and follow it when confronted with a problem	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q7. Take your mind off unpleasant thoughts	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q8. Keep from feeling sad	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q9. Stop yourself from being upset by unpleasant thoughts	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q10. Make new friends	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q11. Get friends to help you with the things you need	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q12. Make unpleasant thoughts go away	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1 <input type="checkbox"/> Certain can do = 2
Q13. Think about one part of the problem at a time	<input type="checkbox"/> Cannot do at all = 0 <input type="checkbox"/> Moderately certain can do = 1

	<input type="checkbox"/> Certain can do = 2
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Rosenberg Self Esteem Scale

Interviewer script: I'll now be asking you some questions about your feelings. For each statement, please let me know if you strongly agree, agree, disagree, strongly disagree, or feel neutral.

Q1. I feel that I am a person of worth, at least on an equal plane with others	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q2. I feel that I have a number of good qualities	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q3. All in all, I am inclined to feel I am a failure	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q4. I am able to do things as well as most other people	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q5. I certainly feel useless at times	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3

	<input type="checkbox"/> Strongly Agree = 4
Q6. On the whole, I am satisfied with myself.	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q7. I wish I could have more respect for myself	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q8. I take a positive attitude toward myself.	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q9. At times I think I am no good at all	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4
Q10. I feel I do not have much to be proud of	<input type="checkbox"/> Strongly Disagree = 1 <input type="checkbox"/> Disagree = 2 <input type="checkbox"/> Agree = 3 <input type="checkbox"/> Strongly Agree = 4

Interviewer script: Thank you! That is the last of my questions for you today. This has been very helpful.

[TURN OFF THE RECORDER]

Appendix C

Codebook for in-depth interviews

NODE NAME	DESCRIPTION
1. Identity/Demographics	Q1. To start, please tell me about yourself? a. How do you think other people would describe you? *** Additionally can highlight summary table at the beginning of each transcript (Q1)
2-3. Support Network and Problem Solving	Q2. When you encounter a problem, what do you normally do? Q3. Who, if anyone, do you reach out to if you need support or advice in your life? a. Why do you reach out to that person? b. What type of support or advice does that person usually provide?
4. Future Goals	Q4. What do you want your life to be like 5 years from now?
5. Outside Work	Q5. Do you work at the clinic outside of your role as a group leader in the SYV program? a. [IF YES] What is your role in the clinic? b. What are your responsibilities in that role? c. How long have you served in that role?
6. Reason for Involvement	Q6. Why did you decide to become a group leader? a. What were the main reasons you wanted to become involved?
7. Hiring and Training Process	Q7. What steps did you do to become a group leader, such as being hired and trained?
8-9. Beliefs about Intervention	Q8. What did you know about the intervention before becoming a group leader? Q9. When you first learned of the intervention, what did you think? a. How have these impressions changed, if at all, since becoming a group leader?
10. Leadership Concerns	Q10. What concerns do you have, if any, about being a group leader?

11. Leadership Goals	Q11. What have been your goals as a group leader?
12. Perceived Workload and Management	Q12. Do you expect the workload as a group leader to be difficult or easy to manage? a. What makes you feel that way?
13. Key Responsibilities	Q13. What do you expect will be the primary things that you do as a group leader?
14. Description of role	Q14. How would you describe your group leader role to others?
15. Duration of group leader role	Q15. How long do you plan on being a group leader? a. Why do you feel like you want to remain a group leader for that long?
16. Personal Experience and Desired Qualities of a Group Leader	Q16. What has been your personal experience as a group leader so far? a. What does it mean to you to be a group leader? b. What do you think are the desired qualities of a group leader?
17. Enjoyable and Challenging Aspects	Q17. What do you enjoy the most about being a group leader? a. What do you like the least about being a group leader?
18. Relationship with Other Group Leaders	Q18. What are your relationships like with other group leaders?
19. Personal Impact of Group Leadership	Q19. How has being a group leader affected your life? a. How has it affected your relationships outside of work?
20-21. Incentives and Support	Q20 What kinds of incentives are there for group leaders to help ensure that the implementation of the SYV program is successful? [Probe about both financial and non-financial incentives.] a. In your opinion, are these incentives enough? i. What makes you feel that way? b. What other types of incentives would encourage group leaders to ensure the program is successful? Q21. What do you think you need to be best supported as a group leader?

	<p>a. Are there areas where you want more support?</p>
<p>22-24. Preparation and Confidence</p>	<p>Q22. How did trainings prepare you for you your role?</p> <p>a. What aspects of the training did you find most helpful?</p> <p>b. How could training be improved?</p> <p>Q23. At the start of being a group leader, did you feel prepared to take on the responsibilities associated with being a group leader?</p> <p>a. How has this changed, if at all?</p> <p>Q24. If participants have questions, how confident do you feel you will be to answer them? a. [IF NOT VERY CONFIDENT] What would make you feel more confident?</p>
<p>25. Perceptions of Supervision Meetings</p>	<p>Q25. How did you find the supervision meetings?</p> <p>a. What would make supervision more useful?</p> <p>b. Did you feel you were able to ask questions?</p> <p>i. What makes you feel that way?</p> <p>c. How comfortable do you feel you will be to honestly report challenges you experience during sessions?</p>
<p>26. Purpose of Intervention</p>	<p>Q26. In your own words, what is the purpose of the intervention?</p> <p>a. What can you tell me about the structure and content of the intervention?</p>
<p>27. Alignment with Youth's Expectations</p>	<p>Q27. What do you think are the expectations of the young people with whom you work regarding being in the SYV intervention study?</p> <p>a. Do you feel like you and the program meets those expectations?</p>

	i. Why or why not?
28-30. Sustainability and Reach	<p>Q28. How do you think the intervention can better reach adolescents and young people who would benefit from it?</p> <p>Q29. What does sustainability mean to you?</p> <p>a. What do you think are important factors in sustaining an intervention like SYV?</p> <p>Q30. How would this intervention need to change in your opinion to be implemented at other clinics in your country?</p>
31. Recommended Changes to Intervention	<p>Q31. How could the intervention be changed to best support youth participants?</p> <p>a. How else could the intervention be changed to better support Group Leaders?</p> <p>b. Is there anything else about the intervention you would change?</p> <p>i. [IF YES] What about the intervention would you change?</p> <p>ii. What makes you feel that way?</p>
32. Wrap Up	Q32. Before we end, is there any other information you'd like to share about your experience as a Group Leader in the SYV program?
<u>CONTENT CODES</u>	<i>Always double code with structural code in transcript</i>
Economic Issues	Anytime economic issues were addressed in the interview.

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