“Those People Motivate and Inspire Me to Take My Treatment.” Peer Support for Adolescents Living With HIV in Cape Town, South Africa

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Abstract
Adherence to antiretroviral therapy (ART) and psychosocial support to manage stigma and disclosure is essential for adolescents living with HIV (ALHIV). Peer support groups can help ALHIV and their families live successfully with HIV. This qualitative study aimed to examine adolescent and caregiver perspectives on peer support groups. Three themes emerged: (1) peer support encouraged adherence to ART, (2) serostatus disclosure outside the family was perceived as difficult, and (3) the peer support group fostered fundamental and meaningful peer relationships for ALHIV. Caregivers felt peer support groups increased self-acceptance and adherence for ALHIV across 3 domains: (1) as motivation for families and adolescents, (2) to increase adolescent independence and maturity, and (3) to help adolescents accept their HIV status and live successfully with HIV. These data highlight the importance of psychosocial support groups for ALHIV and caregivers, illustrating the benefits of a safe space with trusted relationships and open communication.

Keywords
peer support, adolescents, HIV/AIDS, adherence, South Africa

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Introduction
South Africa has the world’s largest population of people living with HIV.1 The current generation of adolescents are disproportionately affected. Many of these adolescents were infected perinatally in the early 2000s before the advent of universal free antiretroviral therapy (ART), which suppress HIV to slow its progression and transmission.2 With improved pediatric HIV treatment, this new generation of South African children born with HIV has reached adolescence and adulthood.3

From 2005 to 2015, 14% of HIV-infected South African 15-24-year-olds were on ARTs, with only 10% of all ALHIV virally suppressed.4 Lifelong ART use is difficult, as many adolescents living with HIV (ALHIV) struggle to adhere to ART for social, economic,5 and psychological reasons.6,7

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What Do We Already Know about This Topic?
Recent studies highlight the potentially beneficial outcomes of peer support groups on improving the health of adolescents living with HIV, including community-based interventions to bolster adolescent mental health, however, despite these known benefits, a comprehensive review of 218 facilities across sub-Saharan Africa found that many clinics do not offer peer support even while advocating the use of peer-led services.

How Does Your Research Contribute to the Field?
Results of this qualitative study show positive perspectives from both adolescents and caregivers regarding an existing adolescent peer support group aimed at providing support for ART adherence and psychosocial issues among adolescents living with HIV in Cape Town, South Africa.

What Are Your Research's Implications toward Theory, Practice, or Policy?
Results highlight the importance of adolescent psychosocial support groups for both adolescents living with HIV and their caregivers, and offer lessons learned for improved interventions to address the needs of this important group.

Common challenges to adherence include limited linkage to healthcare, low retention in treatment, and poor psychological health linked to HIV stigma and fear of disclosure. Adolescence is a time of development and transition, and a period when psychosocial and health-related challenges are common. ALHIV are more likely to experience family instability, co-occurring mental illness, and bullying more frequently than same-age peers who are not living with HIV. ALHIV in Cape Town self-reporting such behavioral health risks were more likely than their counterparts to have suboptimal ART adherence. One study found that ALHIV also have poor functional competence, self-esteem and motivation, higher levels of disruptive behavior and depression than their HIV-uninfected peers. Illness, and even early mortality are concerns for ALHIV who are not adherent to ART.

Many ALHIV also grapple with the death of biological parents, internal and external stigma, community and family disclosure, and identity struggles, concerns that are often exacerbated by poverty and difficulties accessing health care. Within families, caregiver stress, poor adolescent-caregiver communication, and lower caregiver quality of life also affect adolescent well-being. Many perinatally infected ALHIV learn their HIV status from a caregiver, who in turn may find it difficult to discuss an adolescent’s HIV status. Psychological wellness and ART adherence for ALHIV often depends on successful family disclosure, social support, and regular clinic visits. Yet as ALHIV transition into adulthood, they are expected to navigate adherence to ART independently, often becoming disconnected from these supports. Transitioning from pediatric to adult care can be challenging due to barriers such as inadequate clinic infrastructure, lack of clinician training, limited communication with healthcare workers, and HIV stigma. Implementation of Teen Clubs or facility-based ART clinics, which emphasize age-specific peer support for adolescents, can help mitigate the transition to adult care.

A recent systematic review highlights the importance of research exploring low cost, feasible and effective mental health interventions for ALHIV in LMICs as mental health problems are common in this population. Peer support groups show promise in addressing this health service gap. The World Health Organization set strategy recommendations defining adolescent-friendly health services (AFHS) as equitable, accessible, appropriate, and effective. Peer support, defined as support groups with peer-to-peer counseling between ALHIV, is growingly included under AFHS. Recent studies highlight the potentially beneficial uses of peer support groups for ALHIV health. The Zvandiri project in Zimbabwe, which integrated peer-led community interventions into adolescent health service delivery, reported improvements in adolescent and child adherence and retention in care. Peer support can also facilitate retention in care for ALHIV. One in-clinic adolescent peer support group reduced perceived internal and external stigma and decreased ART concern, while also piloting a conditional economic incentive to reward youth based on group-level viral load. Additionally, in high income countries, peer support therapy for perinatally infected ALHIV has been successful in reducing viral load. Despite these known benefits, a comprehensive review of 218 facilities across sub-Saharan Africa found that many clinics do not offer peer support even while advocating the use of peer-led services. More implementation research is needed on peer support groups, their mechanisms, and associated health outcomes.

Another gap in the literature exists in LMICs regarding mental wellness and social support programming for ALHIV to mitigate high levels of ART non-adherence among adolescents. Along with the urgent priorities of combating stigma, there is a need for increased acceptance to enable ALHIV to live fully disclosed lives. Peer support groups have shown promise in improving developmental outcomes, yet more evidence is needed in determining their impact and mechanism in increasing adolescent ART adherence. Additionally, given the essential role of family support in improving health outcomes in ALHIV, additional research must be done to determine the role of family members related to peer-support groups. This qualitative paper explores the role of peer support in facilitating ART adherence and adoption of strategies to live successfully with HIV among South African ALHIV. By examining the perspectives of both ALHIV (aged 12-19) and caregivers of ALHIV, this paper aims to inform public health practice and policy for this unique population.
Methods

Study Setting
The site for this study was a large public hospital in Cape Town, South Africa, located in the country’s Western Cape Province. In the Western Cape, the main languages are Afrikaans, isiXhosa, and English.

Study Design and Sample Selection
This study includes in-depth interviews conducted with 35 ALHIV aged 12-19 years who receive treatment from a dedicated adolescent clinic for HIV treatment and care, and 35 caregivers of ALHIV. The data were collected within a larger study assessing the acceptability of economic incentives to improve adolescent adherence to ART. The larger study includes in-depth interviews with clinicians (n = 30), and a survey of adolescents (n = 199) to assess intervention needs and preferences. The clinic site was ideal for the study, as it serves a large number of ALHIV on ART. The caregivers were biological parents or caregivers of an ALHIV, although not caregivers of the adolescents recruited to this study. In other words, the adolescents and caregivers were not related and did not co-reside.

Study interviews were conducted between December 2016 and July 2017. Adolescents and caregivers of ALHIV were recruited from the adolescent HIV clinic. We used a purposively structured convenience sample to select ALHIV who were already enrolled as clinic patients. Recruitment strategies included flyers and in-person recruitment in waiting rooms. All ALHIV receiving treatment from the HIV clinic were invited to participate in a peer-support group, which ran weekly on days designated for adolescent clinic visits. The peer-support group is facilitated by a lay counselor trained in adolescent care, and adolescent attendance in the group is high. Discussion topics among peers include living well with HIV, disclosure to partners or friends, and safer sexual practices.

The inclusion criteria for adolescent participants were: (1) aged 10-19 years; (2) self-reported positive HIV status; and (3) different aspects of conditional economic incentives, including acceptability, likely influences on behavior, and the preferred format. Interviews were conducted by bi- or multi-lingual South African research assistants in the participant’s preferred language (English or isiXhosa). Interviewers did not work in the clinic site and were not involved with the participants’ care. Participants were reimbursed 100 Rand—approximately $10 USD at the mid-point of study enrolment—for their time and transportation. The final sample size was based on saturation analysis determined by ongoing coding conducted during data collection.

Data Collection
Semi-structured interviews of 60-90 minutes each were conducted in a private room within a clinical or university setting with 35 adolescents and 35 biological parents or other caregivers of ALHIV. The interview guide was organized to explore: (1) barriers and facilitators of adherence, including stigma, fears about HIV disclosure, and access to treatment; (2) psychosocial support and the role of the peer groups; and (3) different aspects of conditional economic incentives, including acceptability, likely influences on behavior, and the preferred format. Interviews were conducted by bi- or multi-lingual South African research assistants in the participant’s preferred language (English or isiXhosa). Interviewers did not work in the clinic site and were not involved with the participants’ care. Participants were reimbursed 100 Rand—approximately $10 USD at the mid-point of study enrolment—for their time and transportation. The final sample size was based on saturation analysis determined by ongoing coding conducted during data collection.

Data Analysis
All interviews were audiotaped, transcribed verbatim and translated into English. After transcription, all identifiable information was removed, and transcripts were stored on password-encrypted computers. We conducted a structured thematic analysis using an iterative process in which both United States and South African team members contributed to development and refinement of the codebook, and interpretation of the data. Detailed codes and nodes were developed through an inductive process to finalize the codebook. Four research team members applied the coding schema to the data, following a structured, hierarchical coding process. Initial interviews were double-coded and compared during development of the codebook. Thereafter, each transcript was coded by one coder. Coders each kept an audit trail to ensure reliability and met weekly to discuss and evaluate coding with the team of coders. The analysis for this paper is based on the codes associated with the domain of ‘barriers to and facilitators of adherence.’ Transcripts were analyzed in NVivo12 software (QSR International Pty Ltd. Version 12, 2018). The data were triangulated and synthesized to compare and contrast perspectives between adolescents and caregivers. Finally, the research team, including co-authors, made final analytical decisions, including thematic analysis and data interpretation.

Ethical Approval and Informed Consent
The following research approvals were obtained: Institutional Review Board and Federal Wide Assurance at Brown University School of Public Health (IRB00000556) and the University of Cape Town (IRB00001938); the Western Cape Province Department of Health, and the hospital where research was conducted. All research was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki. Informed participant adolescent assent, and informed caregiver consent (age 18 years or above) were obtained.
Results

The adolescent and caregiver participants expressed overwhelmingly positive feelings about their experiences with the HIV peer support groups. The 35 adolescent participants (19 female and 16 male) had a median age of 15 years (range: 12-19). The study sample reflected the clinic population at the time of the study. The adolescents selected into the study reflected the demographics and ART adherence patterns of all clinic attendees. Adolescents aged 10-19 were eligible to attend the ART clinic, and at least 90% were perinatally infected. Based on the large numbers of perinatally infected adolescents in the clinic population overall, the study sample is largely comprised of perinatally infected adolescents. Nearly all participants discussed being perinatally infected with HIV and all self-reported currently taking ART, though many discussed struggling to adhere to their medication. For the adolescents, the support groups provided encouragement for adherence and essential psychosocial support, including how to facilitate HIV status disclosure beyond the family, and provided a positive peer environment where young people interacted with other ALHIV. For the caregivers, the adolescent peer support groups indirectly helped them gain a better understanding of how to care for an adolescent with a life-long illness and to cope with related issues such as stigma and fear, as well as companionship and practical advice related to treatment adherence. Many said the most important aspect of the groups was the support provided to the adolescents in their care, including the opportunity for ALHIV to meet and develop social relationships with other adolescents living with HIV.

Adolescent Perspectives

Theme 1: Peer support groups provide encouragement for adherence and essential psychosocial support. ALHIV reported that they felt open to expressing their feelings without judgment in the peer support group. This provided motivation for ART adherence:

I would say that those people motivate and inspire me to take my treatment. In short we help each other.—Adolescent (Male, 17)

The ALHIV described how the support groups facilitate trusted, honest, and effective communication between peers about their difficulties with adherence and accepting their HIV status.

One adolescent explained that in the group, “because they know that we have this thing . . . they are not shocked . . . they just react properly.”—Adolescent (Female, 12) This offers insight into the reality of adolescents’ lives outside the clinic, where they feel judged by peers and community members. Many adolescents felt isolated and dehumanized outside the clinic, where people react with shock or insensitively upon learning their HIV status. One noted that, “I’m scared [because] of those stories—being called names. [such as], ‘You’ve got a virus; you are a worm, we don’t want to see it.’”—Adolescent (Female, 12) They also faced frequent teasing and stigmatization.

She would tease me . . . I become heart broken and then I just ask myself why, and that is where I stop my treatment and I end up saying “It’s better if I die.”—Adolescent (Female, Unknown age)

Theme 2: For many adolescents, HIV serostatus disclosure outside the family was perceived as extremely difficult. For many adolescents, successful treatment adherence or managing their lives with HIV was directly linked to fears of inadvertent HIV serostatus disclosure. With high levels of stigma tied to an HIV diagnosis, adolescents reported concerns about disclosing their status outside a clinical setting, and having personal information exposed to the larger community without their consent.

Their stories usually go like, ‘Geez, I told my friend, my friend told my class, my class told their friends, their friends told the [whole] township.’—Adolescent (Female, 12)

Many adolescent peers grow up hearing misconceptions and mistruths about HIV, and are therefore ignorant of different forms of transmission and the symptoms of HIV, explaining that people speak about those “who have HIV they talk as if they are not human as if—when you like—as if you can tell if a person is HIV just by walking there.”—Adolescent (Male, 18) Additionally, this leads ALHIV to worry that peers outside the support group would make assumptions that they “slept around with many men until I got this thing that I have.”—Adolescent (Female, Unknown age)

School was often a particularly difficult environment. Many ALHIV shared memories of verbal abuse at school because of their illness, “I got very depressed; I was angry, and I isolated myself from everyone and felt lonely.”—Adolescent (Male, Unknown age) Sometimes, these criticisms led to thoughts of suicide and self-deprivation.

So I thought this symptom is obvious and people started to [realise] but they did not know what the cause was. [ . . . ] So I became a laughing stock at school but my friends were there.—Adolescent (Male, Unknown age)

As a result, most adolescents led a partially disclosed life, with some but not all family members knowledgeable about their status, and with friends or others at school often uninformed. Frequently, adolescents did not want to disclose their status even to close friends in fear that “if anyone would know that you are HIV positive no one will want to be your friend.”—Adolescent (Male, 18). Many adolescents explained that even their best friends do not know their status for fear of stigmatization and teasing. One adolescent explained how HIV status disclosure could end a friendship:

I know everything about them, but they also think they know everything about me. [ . . . ] So the fact is I wanted to be open with them and tell them everything but, that might affect the relationship at the end of the day, and things may no longer be the same as before.—Adolescent (Male, Unknown age)
Because of these reactions and lack of support, ART use is frequently hidden. For example, when asked about taking medication in front of their friends, one adolescent said, “Uhm...my friends don’t know that I’m taking ARVs.” — Adolescent (Male, 18) Some participants reported not attending social events to avoid being seen taking their medicine, thus losing opportunities for social support and healthy peer relationships.

**Theme 3: The peer support group fostered fundamental and meaningful peer relationships for ALHIV.** In the support group, ALHIV reported feeling free and supported by peers in a way they were not at school, enabling development of essential peer relationships. Further, the anxiety of disclosure with peers dissipates. One adolescent reported that “everything is open in the support group, no one has secrets.” — Adolescent (Male, 18), while another noted that “we support one another there is no negativity.” — Adolescent (Male, 17) Importantly, the peer support groups were comprised of adolescents experiencing similar challenges:

Everybody has it, [you know], in that [group]. So, you won’t be judged by anyone. If somebody judges you—I’ll tell you, ‘You also have it.’ — Adolescent (Female, 12)

Further, the support groups provided a space to reflect on mental health and well-being. One adolescent suggested that, as many ALHIV deal with complex family relationships at home, the support group may be a place where they feel safe discussing these difficulties.

Speaker: “Even if—you—have your own secrets, you talk about them there. [...] then they remain there.”

Interviewer: “How do you feel after talking in the support group then?”

Speaker: “I feel free.” — Adolescent (Male, 16)

**Caregiver Perspectives**

**Theme 1: Caregivers feel that peer support groups are motivational for ALHIV and their families.** Caregivers felt the support groups were motivational for ALHIV, building community and family relationships through increasing self-acceptance, independence, and understanding. They ensure that the adolescent knows “that s/he is not alone, there is another group with this problem.” — Caregiver (Female, 42)

As a result of welcoming clinic staff and doctors, families are positive about their adolescents participating:

I encourage him very much to join the support group. That’s a very important thing; because when you are with them at least there are those questions which are being asked—you know everything, there is nothing you don’t know. — Caregiver (Female, 44)

**Theme 2: Caregivers perceived that the peer support groups increased adolescent independence and maturity.** Caregivers also gained greater understanding of their adolescent’s needs. One caregiver reflected on how their adolescent wanted to return to the clinic, asking “Mom, I’m so happy can I please go to [the clinic]?” — Caregiver (Female, 44) and insisted on attending the support group on his own, saying “Mom, I am a teenager now,” — Caregiver (Female, 44)

Other caregivers also reported feelings of increased adolescent independence. One noted that “since they started attending on Thursday’s I can see that they have matured [...].” — Caregiver (Female, 48)

Feelings of self-reliance for ALHIV are vital to ensure a healthy transition into adulthood, including ART adherence at a time of increased freedom and autonomy. For many ALHIV, the support group is one of the first places they can express themselves away from parental oversight. Caregivers noted that the ALHIV keep the support group discussions secret:

If the support group aids ALHIV in reaching self-sufficiency and responsibility, then ART adherence may increase as well.

Speaker: A support group is very important. [...] Interviewer: So you are saying that support groups are...? Speaker: They will motivate them... [...] Speaker: Keep them adhering to their medication.— Caregiver (Female, 57)

In fact, many caregivers noted that simply being around other ALHIV helps with ART adherence. **Theme 3: Adolescents find help in accepting their HIV status and are educated about living successfully with HIV, including safe sex and adherence to treatment through their support group.** The support group also helps ALHIV to accept their HIV status. For adolescents, accepting a diagnosis with a life-long disease is extremely challenging because “sometimes you find that another person is struggling because of lack of acceptance.” — Caregiver (Female, 48)

Some caregivers cannot provide the full support needed, so ALHIV can find additional support from peers. From the caregiver perspective, “you find that they love it when it’s Thursday because they meet other [kids and attend] that support group. They meet their peers there.” — Caregiver (Female, 48).

For them to accept the fact that this is how their life is going: but as long as they are continuing to attend the support group sessions, and you as the parent keep on motivating on the other hand. It becomes easier for children to accept and carry on taking their medication. — Caregiver (Female, 44)
In addition to social support, groups “might be a benefit because he might get more knowledge about HIV,” such as safe sex education—Caregiver (Female, 48), which is essential as adolescents begin to navigate partner relationships and sexual activity.

So they are taught that when you are in a relationship you must use a condom . . . to protect yourself and not spread it. And both you and your partner should test “Aren’t you positive, what’s your status; . . . let’s go and test so that we can know each other’s status so that we can be able to continue with our relationship. Let’s protect ourselves and not spread it further . . . .”—Caregiver (Female, 57)

Overall, caregivers often reported that adolescents enjoy the group, commenting that one said “wow, Mom, it is nice there; there’s this and that and the people there if you don’t understand something you can go ask them.” When asked about negative feedback, the caregiver replied “No, . . . he is just happy.”—Caregiver (Female, 44) One caregiver reported that support groups have a “positive impact because they encourage, and they show them that there is still life out there, you see. It is not the end of the world; it is not a death sentence and it is not the end of your life. They still have a life and they can still have the future they want you see.”—Caregiver (Female, 47)

**Discussion**

Adolescence is a critical time for accepting HIV status and for learning to live successfully with HIV into adulthood. Stigma and a lack of psychosocial support, as well as the challenges of living with HIV can further complicate the developmental transition of adolescence for ALHIV. The findings of this study highlight the generally positive perspectives of both adolescents living with HIV (ALHIV) and caregivers of ALHIV in Cape Town, South Africa regarding the role of peer support groups in both psychosocial and ART adherence for ALHIV. This study is unique in that it provides in-depth qualitative data regarding caregiver and adolescent views on the importance of peer support for ALHIV. While other quantitative studies have demonstrated the importance of support for caregivers themselves, there is little literature on the views of caregivers on support groups for their children. One notable finding from the present study is that despite adolescents not being directly asked about the role of peer support in their ability to adhere to ARTs, almost every participant mentioned their peer support group as a response to questions about ways they have succeeded in adhering to treatment.

Peer support groups have significant potential to support ALHIV during this time. Recent evidence supports the idea of peer support as an essential component of interventions for ALHIV, including retention in care. Specifically, peer support can address day-to-day challenges of being an ALHIV, such as remembering when to take treatment and to attend clinic appointments. Through developing relationships between peers in similar situations, support groups build positive environments for adolescents to achieve healthy futures. In addition to emotional support, peer support groups may serve as a way to decrease internalized stigma and improve viral suppression, especially where ALHIV can speak with peers about the challenges of managing HIV.

For adolescents, essential elements of living successfully with HIV are adherence support; psychosocial support; a stigma-free home, community and school; and the freedom to disclose one’s HIV status without fear of consequences. For ALHIV in Cape Town, South Africa, some but not all of these elements are in place. Notably, the peer support groups provided a safe haven for adolescents, who reported feeling comfort and safety from stigma within the support group. By contrast, school and community environments were often unsupportive and sometimes unsafe. For instance, some ALHIV reported avoiding social gatherings that might expose their daily medication use, resulting in inadvertent HIV disclosure and negatively affecting treatment adherence. Similarly, McHenry et al. found that in an ALHIV population, negative feelings toward ALHIV, HIV misinformation, and hurtful comments from peers are common. In the present study, support groups offered refuge from the daily stigma that adolescents experience in schools and communities, testifying to the importance of a place to be vulnerable and discuss common challenges such as stigma, bullying, HIV disclosure, and medication adherence.

The perceived benefits of peer support for adolescents are supported and enhanced by findings from the caregivers of ALHIV, who found benefits for themselves from the adolescent peer support groups, as well as for the adolescents in their care. Caregivers recognized the benefits of peer support for adolescents, including decreased barriers to accessing care, promoting adherence, and providing a safe space to facilitate open communication among peers leading similar lives. For caregivers of ALHIV, the peer support groups were valued for allowing ALHIV to meet and foster relationships with other young people like themselves. Many caregivers expressed concerns about how ALHIV would live successfully with HIV, including entry into intimate relationships and having children. Additionally, the peer groups offered specific types of support the caregivers could not access such as education on safe sex practices, or in some instances, reduced their caregiving burden. Increasing the mental health of caregivers and decreasing their burden may improve overall health of a family, as well as for adolescents and caregivers individually, and is an important consideration for future peer support efforts. Above all, the peer support groups provided a space for ALHIV and caregivers where the challenges of common life could be temporarily relieved.

This study accentuates important aspects of the lives of ALHIV in Cape Town, South Africa, highlighting specific psychosocial vulnerabilities including stigma, lack of social support, difficulty accepting a life-long illness, and concern about the future. These findings illustrate several ways that peer social support improves daily life for ALHIV, including leading to improved ART adherence and related psychosocial...
factors, thus improving adolescent health overall. This study found that the peer support group is popular with young people living with HIV and their families because it fills a great unmet need psychosocial or other support resources, not to mention a safe space to meet or talk with other youth. Similarly, access to treatment and care, while available, can be difficult for young people given transportation limitations and economic hardships in their daily lives.

Study Limitations
The limitations of this study include social desirability bias among peer group participants, who might be reluctant to criticize the groups, and possible sampling biases. We attempted to mitigate this bias by ensuring that interviewers did not work in the clinic site and were not involved in the participants care. This study includes adolescents who are already in care, recruited from a clinic where they obtain ART. Adolescents not in treatment likely face more severe barriers to initiation and therefore adherence. Also, the study took place in Cape Town, South Africa, a relatively well-resourced area in comparison to rural or other areas in South Africa without good access to health care and treatment. Lastly, while we are aware that there may be some bias within these responses, this qualitative study was intended to provide insight and understanding of young people’s motivations for participation rather than an evaluation of the peer support groups. This study was not designed to investigate differences between adolescents of different genders or aged, but rather to qualitatively explore their perceptions and attitudes toward the peer support program. Despite these limitations, these findings report on a well-received peer support model and have potential to guide future interventions for adolescent adherence and psychosocial support.

Conclusion
In summary, this qualitative paper highlights the importance of psychosocial support groups for adolescents living with HIV and their caregivers. It illustrates the benefits of a safe space where communication is open and relationships are trusted, to the benefit of both ALHIV and their families. This in-depth qualitative research gives insights into how peer support groups are experienced by adolescents in South Africa. Implementation science research should be employed to conduct more rigorous evaluations of peer support groups to understand their benefits, and to implement more widely in LMICs and low-resource settings.

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Author Contributions
Omar Galarraga, Jackie Hoare, Caroline Kuo, and Abigail Harrison were responsible for the study conception and design. Data collection and oversight were performed by Jackie Hoare, Bulelwa Mtukushe, Rebecca Sher, Bianca Davidson, Michelle Carrhill, and Miuleki Matiowane. Qualitative data analysis was performed by Camerin Rencken, Scarlett Bergam, Ariana Pather, and Abigail Harrison. The first draft of the manuscript was written by Camerin Rencken and Scarlett Bergam and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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