

Africaid's Zvandiri: Peer Support Interventions for Young Mothers Living with HIV

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Cover photo: Young mentor mother with HIV self-testing kits (photo provided by Zvandiri)

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Executive Summary

Sub-Saharan Africa (SSA) accounts for two-thirds of people living with HIV globally. Youth in the region, particularly young women, adolescents, and girls, are disproportionately vulnerable to HIV acquisition due to social environmental factors such as stigma, gender inequity, and barriers to accessing HIV testing and treatment. Zvandiri, a private nonprofit program run by AfricAid, was created in 2004 to address this issue. The initiative connects youth (children, adolescents, and young people) living with HIV to peer counsellors also living with HIV. These counsellors — community adolescent treatment supporters (CATS), and young mentor mothers (YMMs) — are trained, mentored, and dedicated to supporting young people living with HIV (CATS support all youth living with HIV, while YMMs focus on young mothers living with HIV). YMMs and CATS improve access to HIV testing and treatment by connecting youth to the services that they need, as well as by providing mental health support. With both programs, Zvandiri’s holistic and peer-based approach is the linchpin to its success.

Zvandiri’s YMM program focuses on reducing barriers for and empowering young mothers living with HIV, and serves as a successful regional

example of Public-Private Partnerships (PPP) between government-provided healthcare and private client-based services, with CATS and YMMs serving as the efficiency core of the model. As Zvandiri staff noted, the YMM program trains adolescent mothers to support their peers with adherence and sexual reproductive health services, and supports the Ministry of Health and Child Care in reducing mother-to-child-transmission of HIV among adolescent mothers.

We explore how the YMM program acts as a bridge between young mothers living with HIV and existing public structures for HIV testing and treatment in Zimbabwe. Following an extensive literature review, we conducted 29 virtual semi-structured interviews with Zvandiri staff and volunteers in Zimbabwe to explore socioeconomic barriers to testing and treatment, cross-cultural perspectives on peer support, and the program’s sustainability and scalability.

Our findings reveal that the YMM program’s extensive peer support has helped increase young mothers’ medication (i.e., antiretroviral therapy) uptake, adherence, viral load suppression, early infant diagnosis uptake, and partner testing, while promoting empowerment and acceptance of one’s HIV positive serostatus

among adolescent girls and young women. With respect to barriers of success, we identified two distinct categories: (1) challenges related to socio-structural factors that currently limit the YMM program's success (e.g., gender-based violence and intimate partner violence), and (2) barriers related to expanding the service provision and scaling up the YMM program to new countries in the region, as well as to more health clinics within Zimbabwe (e.g., limited funding and resources).

Zvandiri has expanded to 10 African countries outside of Zimbabwe (Namibia, Rwanda, Zambia, Mozambique, Eswatini, Ghana, Nigeria, Uganda, Tanzania, Angola) with 1,600 CATS supporting 56,000 youth.¹ They aim to expand their model to 20 countries by 2030 and reach 1 million youth living with HIV. The YMM program has a significant scale of impact, covering 19 districts (80 health facilities) and a total of 1,806 young mothers being supported by 127 YMMs.

Context: Youth Living with HIV in Sub-Saharan Africa

Children and adolescents living in SSA are disproportionately vulnerable to HIV. In 2020, the region accounted for 67 per cent of people living with HIV (PLHIV) globally but was home to 89 per cent of the world's youth (aged 10 to 19) living with HIV (YLHIV).² Of particular concern within this group are young women and girls, who represent three in every four new HIV infections in the region. HIV-related stigma, and fear of judgment from friends and family, may also limit youths' access to HIV prevention and treatment

and exacerbate challenges accessing health care and social support. Other barriers to HIV care and treatment adherence are systemic. Despite their vulnerability, children and adolescents' needs related to HIV are rarely effectively addressed by national plans intended to promote treatment. Consequently, these plans are inadequate in mitigating transmission among YLHIV, particularly among young mothers living with the condition.

Although HIV is present in most countries in SSA, national plans failed to reach 10.3 million PLHIV in the region in 2018 because many people there still lack basic knowledge about the disease.³ This is also partly caused by a lack of connection between treatment facilities and local communities, as well as limited input from PLHIV about their preferred services and modes of operation. Addressing such shortcomings by creating youth-oriented and comprehensive HIV treatment programs, such as the young mentor mothers (YMM) program, is a necessary step to reaching the 1.55 million YLHIV in SSA with consistent, life-saving treatment.⁴

In 2004, six youth living with HIV created Zvandiri, or "As I Am" in Shona, a peer-based nonprofit program intended to improve HIV treatment adherence, prevention, and support in children and adolescents. As a peer-led model of community, clinic, and digital health services in partnership with governments, it delivers services to young people living with HIV. Under mentorship from Zvandiri staff, community adolescent treatment supporters (CATS) and young mentor mothers (YMMs) use innovative and holistic methods and peer support to improve adolescent engagement in care, adherence to treatment, rates of virological reduction, and mental well-being. While YMMs

1 "Where We Work," Zvandiri. [↗](#)

2 "Fact Sheet — World AIDS Day 2021," UNAIDS. [↗](#)

3 "UNAIDS Data 2018," UNAIDS. [↗](#)

4 Jamiu Adetola Odugbesan, Husam Rjoub, "Evaluating HIV/Aids Prevalence and Sustainable Development in Sub-Saharan Africa: The Role of Health Expenditure," *African Health Science*, 20, no. 2 (2020): 568–78.

perform a very similar role to CATS, they are dedicated to supporting young mothers living with HIV, as well as their babies and partners. With both programs, Zvandiri’s holistic and peer-based approach is the linchpin to its success. Zimbabwe’s government has already adopted Zvandiri’s CATS model for national scale-up, and the program has been recommended for scale-up by the World Health Organization (WHO), UNAIDS, UNICEF, and the Southern African Development Community.⁵

We sought to understand, in broad terms, the successful reach of AfricAid’s Zvandiri’s YMM program in Zimbabwe, especially how Zvandiri provides counselling and connects young mothers living with HIV who are hard to reach with existing testing and treatment structures provided by the MoHCC.

Relevant United Nations Sustainable Development Goals (SDGs)



Ensure good health and promote well-being at all ages. One target is to end the epidemic of HIV and AIDS by 2030 (Project 2030).



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



Gender Equality — Achieve gender equality and empower all women and girls.



Reduced Inequalities — Reduce inequality within and among countries.



Partnerships for the Goals — Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Hardest to Reach

While Zvandiri operates in 11 countries within Africa, their YMM program has thus far been established in Zimbabwe only (although it is in the initial stages of implementation in Tanzania and Eswatini). The program targets young women and girls (up to age 24) living with HIV. This population merits particular attention for three reasons. First, Africa has the highest adolescent pregnancy rate in the world at 18.8 per cent.⁶ This means that young women and girls are more likely to become pregnant than young women and girls in other regions. Second, because young women and girls in Africa represent three in every four new HIV infections in the region,⁷ young mothers are more likely to acquire HIV than several other populations, including older women. Third, young mothers living with HIV are a key priority population to target with improved HIV care access because vertical HIV transmission rates (i.e., mother-to-child transmission) are three times higher among adolescent mothers than among adult women. The infants/children of young mothers living with HIV are therefore at a disproportionately high risk of contracting HIV, thus further distancing Africa from meeting the UN’s goal of ending the HIV epidemic by 2030. To effectively prevent HIV transmission to their

5 “Zvandiri: Peer Counseling to Improve Adolescent HIV Care and Support,” PEPFAR, April 22, 2022. [↗](#)

6 Elona Toska, Christina Laurenzi, Kathryn Roberts, Lucie Cluver, and Lorraine Sherr, “Adolescent Mothers Affected by HIV and Their Children: A Scoping Review of Evidence and Experiences from Sub-Saharan Africa,” *Global Public Health*, 15, no. 11 (2020):1655–73.

7 “Women and Girls and HIV 2017,” UNAIDS. [↗](#)



Figure 1. Zvandiri staff leading a meeting with young men in the community (photo provided by Zvandiri)

infants, young mothers living with HIV require consistent medication and support throughout their pregnancy and breastfeeding.

Despite this, young mothers living with HIV in Zimbabwe often lack necessary support both from loved ones and medical professionals. While some of their pregnancies occur after early marriage, the majority are not planned. Unmarried mothers with unplanned pregnancies have varying degrees of involvement and support from their partners. They may also face challenges with housing since stigma surrounding early and teen pregnancy and/or their HIV status can result in youth being forced from their homes. Without adequate housing and support from loved ones, young mothers living with HIV may not have access to the economic or social support necessary to access effective HIV treatment while also taking care of a child. This issue is further compounded by their risk of experiencing violence from partners and/or families as a result of stigma surrounding their HIV status. These factors not only cause pressure to conceal their HIV status but they also can limit engagement in effective treatment and support services. As a result, young pregnant or breastfeeding women living with HIV are disproportionately vulnerable

to the effects of the HIV epidemic and can be considered a very hard-to-reach population that requires specialized support and attention.

About this Intervention

In partnership with the Ministry of Health and Child Care (MoHCC) and UNICEF, AfricAid launched Zvandiri's young mentor mothers (YMM) program in 2018 as a response to the disproportionately high prevalence of HIV among women and the high rates of young pregnancies in SSA. The program was established in five high-HIV-prevalence regions of Zimbabwe and soon expanded to over 25 districts and their surrounding communities.⁸ Its structure is based on peer-led service delivery conducted by trained young mothers aged 18 to 24 years living with HIV, who receive initial training as community adolescent treatment supporters (CATS). Zvandiri and the MoHCC aimed to create a sustainable initiative by developing implementation guidance, training curricula, and activities to support YMMs in their service delivery, including later employment opportunities for their team.

8 Tatenda Chimbwanda, "Gaining Knowledge, Friends and Support Through the Young Mentor Mothers' Programme," UNICEF, December 11, 2018 [↗](#); Ibrahim Yakubu and Waliu Jawula Salisu, "Determinants of Adolescent Pregnancy in Sub-Saharan Africa: A Systematic Review," *Reproductive Health*, 15, no. 1 (2018). [↗](#)

The YMMs are trained to support other young mothers living with HIV during pregnancy and breastfeeding to help optimize testing, treatment, and service access for them, their infants, and their partners. Services include mental health counselling, connection to HIV testing and treatment, linkage to antenatal care, supports to ensure that young mothers are prepared for delivery, access to viral load testing and early infant diagnosis, and adherence check-ins. YMMs follow up with young mothers through weekly home visits and regular mobile text reminders, which not only foster sustainable bonds but also allow for further assessment and the identification of other potential concerns (e.g., mental health conditions and opportunistic infections). They are also working on a young mentor dads curriculum, and a *Standard Operating Procedures for Zvandiri Mentors and Young Mentor Mothers* manual to guide the provision of care.⁹

Zvandiri's YMM model has proven successful, with 94.6 per cent of young mothers registered in the program receiving a valid/accurate viral load result, and 97.1 per cent of those young mothers achieving viral suppression by the end of 2020.¹⁰ This is an improvement over the country's 2020 statistics, which indicate that viral suppression was achieved in only 66.2 per cent of women aged 15 to 24 living with HIV.¹¹ In addition, 96 per cent of HIV-exposed infants were tested for HIV and received their test results, which is a dramatic improvement compared to the national average of 64 per cent.¹² Perinatal HIV transmission among these infants was just 1 per cent, which is

much lower than a recent estimate of Zimbabwe's mother-to-child transmission rate of 6.7 per cent.¹³

The mental health of young mothers enrolled in the program is also frequently evaluated, with over half of mothers (55.9%) scoring 12 or higher on the Edinburgh Postnatal Depression Scale (EPDS).¹⁴ The YMM program targets maternal mental health through support groups, workshops, counselling, educational programs, and the Young Mothers Lounge—an anonymous, SMS-based group for YMMs to communicate with the young mothers. The program also aims to improve partner disclosure and testing in order to: (1) link partners who test HIV positive to antiretroviral therapy, (2) link partners who test HIV negative to pre-exposure prophylaxis (PrEP) and thus minimize HIV transmission, and (3) improve young mothers' relationships with their partners. For instance, 84.3 per cent of partners without HIV were linked to HIV PrEP by the YMMs in 2020.¹⁵

Because young women living with HIV face several clinical and psychological obstacles, peer-led initiatives, such as the YMM program, can support young mothers to access health care. Even so, Zvandiri acknowledges a need to strengthen referral systems between hospitals and clinics to ensure that infants and mothers receive timely treatment. They also note several barriers to scaling and expanding the YMM program, including limited funds, cultural norms (e.g., the belief that young infants should not be taken outside the house except to receive vaccines), HIV-related stigma, and long lab turnaround times.

9 "Prevention of Mother to Child Transmission (PMTCT)," Zvandiri, Implementation Brief Series 2021. [↗](#)

10 "AfricAid Annual Report 2020," Zvandiri. [↗](#)

11 "Zimbabwe Population-Based HIV Impact Assessment," PHIA, December 2020. [↗](#)

12 "Young Mentor Mothers Initiative: A Peer-Support Model Tailored for Young Mothers and Their Infants in Zimbabwe 2021," UNICEF Children and AIDS. [↗](#)

13 Reuben Musarandega, Joanna Robinson, Priti Dave Sen, Anna Hakobyan, Angela Mushavi, Agnes Mahomva, and Godfrey Woelk, "Using the Critical Path Method to Rollout and Optimise New PMTCT Guidelines to Eliminate Mother-to-Child Transmission of HIV in Zimbabwe: A Descriptive Analysis," *BMC Health Services Research*, 20, no. 1 (2020): 1042.

14 "Prevention of Mother to Child Transmission (PMTCT)."

15 "AfricAid Annual Report 2020."

Zvandiri's Goals

While Zvandiri's YMM program is large, staff are looking to scale up the program to more regions, countries, and services. To date, the program has been implemented in 19 districts and 80 healthcare facilities across Zimbabwe. This model of intervention is particularly successful and unique because of its focus on peer support. YMM recruitment is targeted to ensure that YMMs are comfortable with disclosing their HIV-positive serostatus to their own families and peers, as well as serving as a positive role model and example for the young mothers. Zvandiri has made it clear that their intervention focuses on individualized, personal, and empathetic care, but this can be a challenge since one YMM may have up to 20 young mothers in her care. Ensuring a good YMM-to-young-mothers ratio can be a barrier to scaling up. They are very intentional about preserving the quality of each of their programs, which may factor into why the project is being piloted in just one country (Zimbabwe).

Management-level employees within AfricAid's Zvandiri are enthusiastic about expanding the YMM program as well as a younger mentor dads model, with a goal of expanding the Zvandiri model to 20 countries and reaching over 1 million youth living with HIV by 2030.¹⁶ Zvandiri follows the UN's General Assembly goal of 95-95-95 targets, which they have embedded into their own campaign against the HIV epidemic. The goal "calls on countries to provide effective HIV combination prevention options to 95 per cent of all people at risk of acquiring HIV; get 95 per cent of people living with HIV aware of their HIV status; get 95 per cent of people who know their status to be on HIV treatment; and for 95 per cent of people on HIV treatment to be virally suppressed."¹⁷ However, some interviewees



Figure 2. A Zvandiri YMM counselling a young mother and her partner (photo provided by Zvandiri)

noted the challenge of achieving these targets and expanding the program in the absence of additional funding.

Zvandiri strives for a model that is mutually beneficial for mentees and mentors, meaning that their positive impact on individuals and the community is amplified. Zvandiri has been somewhat successful in this, but the lack of financial resources means there remains a gap in reaching the hardest-to-reach citizens.

Methods

We conducted a series of semi-structured interviews with YMMs and AfricAid's Zvandiri staff via Zoom and WhatsApp video/audio calls.

16 "Who We Are," Zvandiri. [🔗](#)

17 Katherine Heath, Jacob Levi, and Andrew Hill, "The Joint United Nations Programme on HIV/AIDS 95–95–95 Targets: Worldwide Clinical and Cost Benefits of Generic Manufacture," *AIDS (London, England)*, 35, no. S2 (2021): S197–S203.

Informed by literature reviews, four researchers developed interview questions that were verified by a third party from the University of Toronto. We identified potential participants (consisting of Zvandiri staff and volunteers) through referrals from Zvandiri’s head staff. Research ethics approval was obtained from University of Toronto.

Prior to the online interviews, we obtained written consent through signed informed-consent forms (via email and WhatsApp) and we emphasized participants’ right to not answer, as well as their right to withdraw consent at any point. All communications and interviews were conducted in English. Researchers took notes during each interview, which were then stored on an encrypted SharePoint file. Each participant received an ID number to link their interview responses, and all identifiable information was removed. To anonymize interview data, we ascribed interview numbers to each interview and did not mention the name or demographics of the participant. Any records of communication with participants as well as all online interview material, data collection, and deliverables were stored on the FIPPA-compliant server, SharePoint (FIPPA refers to the *Freedom of Information and Protection of Privacy Act*). All virtual interviews were conducted in a secluded area when possible. The audio from each interview was recorded via Zoom and saved to an anonymized and encrypted folder in SharePoint.

Participants received reimbursement for mobile data purchase (USD 5). They had the option to withdraw their contribution to the project partially or absolutely at any time up until the report’s publication. Participants were de-identified, thus removing the connection between participant names and identification numbers. The master list of identification numbers was destroyed prior to publication.

Demographic Results

After contacting 139 potential English-speaking participants (all de-identified and numbered from 001 to 139), we interviewed 29 participants (consisting of Zvandiri staff and volunteers). The remaining 110 participants either did not respond to interview requests or were unable to join the interviews because of poor network connection. The mean age of the participants was 30.2 years, and most interviewees were women (89.7%) with full-time employment (75.9%) (Table 1).

Table 1. Sociodemographic characteristics of participants sampled from Zvandiri (N=29)

AGE	
Mean (SD)	30.2 (7.07)
Median [Min, Max]	28.0 [22.0, 54.0]
GENDER	
Man	3 (10.3%)
Woman	26 (89.7%)
EDUCATION	
Completed high school	4 (13.8%)
Attended/completed some college	7 (24.1%)
Attended/completed some university	11 (37.9%)
Completed graduate school	7 (24.1%)
EMPLOYMENT	
Full time	22 (75.9%)
Part time	4 (13.8%)
Other	3 (10.3%)
ZVANDIRI ROLE	
Zvandiri staff	23 (79.3%)
Other (e.g., healthcare provider, counsellor)	6 (20.7%)

How the Intervention Works

The intervention's strongest impacts were in the areas of: (1) comprehensive support and access to health services, (2) medication adherence, and (3) viral suppression.

Support and Access to Health Services

The Zvandiri model, and the YMM program specifically, has had positive impacts in the community related to improved HIV medication uptake, expanded access to health services, increased viral load suppression, and better acceptance in the communities of implementation. Participants described how the model connects young mothers living with HIV to trained young mentor mothers living with HIV (YMMs) who serve as peer mentors. Many interviewees attributed increased medication uptake and improved health services access to support and guidance from YMMs.

For example, when asked about the uniqueness of the YMM program compared to other HIV prevention services/programs, one interviewee said that "[The YMM program has an] understanding of transmission of [HIV in] women and there is peer-to-peer support ... Our program is unique in that we train YMMs who have gone through the experience of pregnancy, childbirth, and breastfeeding, and have overcome all the fears of HIV transmission and can offer that comprehensive peer-to-peer support because they understand the needs of the young mums, they understand the challenges, they understand the fears about tomorrow ... [The work of the YMM program is] more tailored and more specific than what other programs are doing."

Others provided more specific details regarding ease of access to HIV testing and treatment outside of the program. Interviewees commented on the unique programs that Zvandiri offers and how they are not as accessible outside the



Figure 3. HIV treatment medication (photo provided by Zvandiri)

program, including sexual and reproductive health counselling and infant care resources. For instance, one interviewee noted that "[access to HIV testing and treatment without the program] would be a little bit difficult in some regions. The YMM, they touch on quite a variety of issues with young mothers. Say it's sexual health issues, testing, referrals, infant feeding, and viral load monitoring ... So by them not being there, I think we will be having a gap in service delivery."

Several interviewees commented on the program's ability to improve access to HIV treatment and prevention medication, as well as other important healthcare services, in both mothers and fathers. The support that YMMs provide is not limited to HIV medication uptake, and instead extends to other important health services. Increased access to early infant diagnosis (EID), tuberculosis treatments, sexually transmitted infection (STI) testing, and human papillomavirus (HPV)/cervical cancer screening were also highlighted throughout the interview process. As another interviewee put it, "The YMM need[s] to touch on issues like EIDs, partner testing, HPV/cervical cancer screening, PrEP [uptake] ... [and] has to arrange visits [for] the male sexual partner

in his home and provide HIV self-testing kits ... I have also seen an increase in the uptake of PrEP among HIV negative male sexual partners of young mothers — unlike before.”

The expanded health services provided by the program have led to improvements in medication uptake and HIV transmission rates. Several interviewees mentioned this, including one who described how, “YMM can come for testing and treatment of STIs. [They] know importance of why the mother is exclusively breastfeeding, support the mother, [and when the infant is] due for EID or other things [they] bring [them to the] hospital ... We are seeing positive change in the community: rates at which children contract HIV are decreasing, mothers now know the importance of exclusive breastfeeding, booking early, importance of deliveries at hospitals instead of within communities.”

Medication Adherence and Viral Load Suppression

Many participants highlighted that an important aspect of the YMMs’ work is promoting adherence to antiretroviral therapy (ART) for young mothers and their family members once they have tested positive for HIV and begun treatment. Following ART uptake, YMMs promote adherence through regular mobile text reminders, weekly home visits, and information sharing during support groups and ART refill days. For young women who may not feel comfortable with home visits because of issues with disclosure and/or risks of gender-based violence, one interviewee explained that YMMs encourage in-person meetings in alternative public areas such as shopping malls. In these ways, young mothers are not only encouraged to continue adhering to their treatment plan, but they are also able to learn of best practices for how to do so. Another interviewee told us that young mothers “want to know how someone has faced the challenge

[of HIV] and managed to successfully adhere to medication” — information that YMMs are well-equipped to provide.

Beyond promoting adherence, these diverse forms of interaction foster sustainable social bonds between young mothers and YMMs that better allow for the identification of other potential concerns among young mothers when necessary. Concerns such as mental health issues or domestic violence may directly or indirectly hinder adherence among mothers. For this reason, YMMs pay particular attention for any red flags that mothers might be facing such issues, or that they might not be adhering properly to their treatment. Examples of red flags for poor adherence include mixed feeding (giving a baby a combination of breast milk and nutritional substitutes), lack of social support systems, and lack of bonding with the child. Should a young mother show signs of difficulty in adhering to her medication plan, YMMs encourage them to attend enhanced adherence-counselling sessions within the month, which YMMs also provide, as well as to attend blood testing for viral loads as needed.

By promoting adherence, the YMMs also encourage viral load suppression among young mothers. First, they explain to these stakeholders what viral suppression is, why it is important, and how they can achieve it effectively. They then encourage viral suppression among young mothers through the frequent digital and in-person check-ins described earlier, as well as adherence counselling when necessary. In these ways, the social support that YMMs provide has been shown to improve viral load suppression among young mothers. This helps to prevent the transmission of the virus, since higher rates of viral suppression among young mothers means lower rates of seroconversion in both babies and sexual partners. For this reason, one interviewee stated that they “would like ... to have 100 per cent viral suppression” among all clients in the program.

Barriers to Success

There are two dimensions to the program’s obstacles: (1) challenges related to addressing socio-structural factors and (2) barriers related to scaling up the young mentor mothers (YMM) program (Figure 4).

Challenges Related to Socio-structural Factors

Our interviews identified three major socio-structural barriers to the program’s success: gender-based violence, malnutrition, and HIV-related stigma.

GENDER-BASED VIOLENCE (GBV)

Although the program screens for violence when taking on new young mothers, in the words of one interviewee, “there [is] little Zvandiri is able to do” in response to this issue. YMMs and Zvandiri employees both flagged GBV as a detriment to various facets of the program. Gender-based violence can jeopardize medication adherence and communication with the young mother, including home visits and mobile phones. This is because mothers whose partners are unaware of their HIV status “fear their spouse’s reactions” — and their potential for resulting physical or emotional abuse. In other instances, young mothers are “financially dependent on their partners” and

must continue the relationship out of financial hardship. Adolescent girls’ and young women’s financial insecurity can result in the silencing of victim-survivors who feel they have to retain their relationships out of financial need. Fear of abuse also inhibits young mothers from accepting or being able to access medication through clinic visits, counselling, and home visits, among other supports. Consequently, GBV undermines the efficacy of the YMM program and the support its YMMs provide.

The program seeks to counter the consequences of GBV by fine-tuning their methods to meet the young mothers’ needs. More home visits or coded text communications are used to supplement clinic visits that women miss as a result of abuse or fear of abuse, and YMMs provide as many relevant resource referrals as possible. Ultimately, however, the prevalence of GBV and its impact on young mothers with HIV falls outside of Zvandiri’s and the program’s scope. While young mothers experiencing GBV are referred to support services and resources, it is not possible for the program to directly ensure their safety.

MALNUTRITION

Many participants described how malnutrition affects medication adherence and mental health. While one of Zvandiri’s main objectives is promoting adherence to HIV medication for young mothers and their family members,

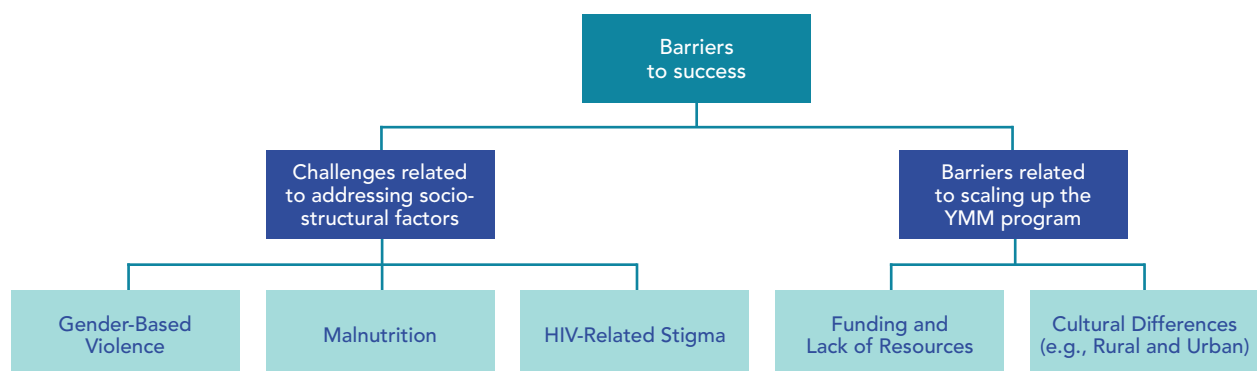


Figure 4. Barriers to success

malnutrition resulting from food insecurity limits women's capacity to take their medication. Many interview participants noted that young mothers who cannot regularly access sufficient food are likely unable to maintain treatment and breastfeeding. They noted that malnutrition can hinder a young mother's personal strength and overall well-being.

Food insecurity causes profound challenges with adhering to ART among young mothers. According to one Zvandiri staff member, young mothers who face malnutrition "tend to skip their medication because ... they know it makes them weak if they have not eaten." And this issue is experienced not only by young mothers but by the YMMs as well since, as one interviewee put it, "the YMMs and their babies need to be fed, need to receive food in order to nourish the child and support the babies" just as much as the young mothers receiving their support do.

Interviewees knew that malnutrition can have dangerous health consequences — young mothers who are malnourished may have higher viral loads that put their health at risk, as well as increased chances of HIV transmission to their partners and children. Interviewees highlighted a particular connection between malnutrition and the likelihood of seroconversion among children. For example, one noted that "some of these children are really malnourished, which leads to infants and babies seroconverting [even though] we're trying to prevent mother-to-child transmission." While this issue of malnutrition among young mothers and their infants is an obstacle across districts, one interviewee highlighted that it has a disproportionate impact in rural areas, where "malnutrition is more prevalent but harder to manage" as a result of greater limitations in food access.

The organization is constrained in its capacity to assist young mothers with their nutritional needs for financial reasons, but they make referrals to other relevant ministries in the

country (particularly within the Department of Social Development) and other implementing partners that have such supports. Young mothers can be referred to a district nutritionist or to the Department of Social Development for nutritional support, supplements, or food security services. One interviewee noted that if Zvandiri were to receive additional resources dedicated to addressing the food security needs of the YMMs, it would improve the quality of the service provided to young moms while creating more opportunities for them to be self-sufficient.

HIV-RELATED STIGMA

Participants highlighted that stigma, whether from partners, family members, or community members, is a significant barrier to the program's successful implementation. Some communities may have low enrolment of young mothers because they fear disclosure-related stigma. Concern about stigma means that "it takes time for them to want to join the program," which might subsequently restrict the "target of reaching those who need to be tested." This is because some young mothers fear that disclosure of their HIV status will result in social isolation from family members and/or GBV from partners. The resulting lack of disclosure can hinder their open and easy access to care and adherence to medications: some young mothers "end up defaulting, not taking their medicines because they don't want it to be known that they are HIV positive" and thus cannot regularly access treatment. It may also limit their ability to practise exclusive breastfeeding for the first six months following delivery. Exclusive breastfeeding may be discouraged by spouses and family for cultural reasons, and failure to partake in it can increase the risk of transmission to infants.

One participant highlighted how sometimes, if a partner is not aware of a young mother's status, "the YMM is not even wanted to be seen at the homestead for the fear of disclosure." In other words, the presence of a YMM may indicate to

the partners and broader community members that someone in a particular home is HIV-positive. While this is a major barrier, YMMs attempt to overcome the issue by arranging visits either at the organized support groups or in more neutral locations. Finally, if a partner does not know the young mother is living with HIV, “it’s very difficult for that partner to go ahead and have [the] HIV test if recommended and [as a result] it’s very difficult for them to go and take PrEP.” This presents challenges in HIV prevention within serodiscordant partnerships, as well as in the provision of life-saving treatment for young mothers with HIV and/or their partners with HIV. Lack of disclosure can also prevent children from getting necessary HIV testing and prophylaxis.

Barriers to Scaling Up the YMM program

Potential challenges of expanding the provision of services and scaling up the program to other regions or countries include lack of funding/resources and cultural differences.

LACK OF RESOURCES

One of the largest challenges that interview participants identified in Zvandiri’s YMM program is the lack of adequate funding as a barrier to success, scale-up, and sustainability. Limited funding affects program implementation and accessing young mothers. One interviewee described how, because of short staffing as a result of limited funding, Zvandiri workers struggle to “adequately support carers on the ground” because they are “required to be at office” and the resultant “fieldwork and work balance” was difficult to navigate. Likewise, limited funds restrict the program’s ability to incentivize YMMs to join as volunteers and to provide monetary and material support for those who do. While the YMM program supports young mothers through economic-strengthening activities (i.e., small projects that bring the mothers income), this is primarily

through information support. Because of funding shortages, young mothers need to access their own savings to fund these projects, limiting how much they can invest.

In addition to staff shortages, limited funds restrict the program’s ability to increase its vehicle and testing-equipment supply. Without vehicles, YMMs are limited to bicycle use and walking and are consequently unable to reach young mothers living in faraway communities. While the YMM and community adolescent treatment supporters (CATS) models share vehicles because they are implemented by the same district teams, this was a challenge. One interviewee said “if we [the YMM program] had our own car it would be better than mixing the CATS and the YMMs’ [cars].” Other participants noted that limited testing equipment resulted in the same equipment (such as EID point-of-care machines) being shared by a significant number of people, leading to longer wait times and shortages of testing kits.

RURAL AND URBAN DIFFERENCES IN HIV CARE ACCESS

Other obstacles of scaling the YMM program to new countries, districts, and regions include surmounting regional cultural differences, bridging service-provision gaps between rural and urban areas, and overcoming difficulties related to distance and travel. Throughout the interviews, many emphasized that regional cultural differences may pose a barrier to scaling the program. Several interviewees noted that the religious or traditional values of other countries in the region could impede the successful implementation of the program. For example, an interviewee commented, “I think [successful scaling] will depend [on] the culture of particular countries. Some people or cultures are more conservative and wouldn’t appreciate someone coming to their home once or twice every month ... [they] might not be comfortable with someone coming to their house to discuss topics such as safe sex and HIV.”

Many argued that scaling of the YMM program will be successful only if the program is community tailored and adjusted to the cultural needs (e.g., languages, societal norms) of the respective region. The issue of a women-led program in a patriarchal society also came up several times, and interviewees noted that Zvandiri will need to overcome this issue when attempting to scale the YMM program to other SSA countries.

Many highlighted the importance of acknowledging the existing religious and traditional cultural practices, while also educating the community on evidence-based Western medicine. For example, one interviewee questioned, “[How] will the communities respond where they are used to males taking the lead? How do they feel about women taking the power? ... [A challenge is overcoming] the different cultural backgrounds from different countries whereby some believe mostly in faith healing, traditional healing, and we’re coming in to support the medical model/psychosocial model.” This interviewee, and others, highlighted the need to reassure traditional leaders and let them know that even though “it’s our African culture and we still need them for their advice ... there is scientific information that has been coming up and is constantly updated [which needs to be considered].”

Several interviewees noted that access to YMM services was more likely to be accepted and accessible in urban communities compared to rural areas. Several noted that distance and transport options were major barriers to service provision in rural communities. Although Zvandiri does provide YMMs with bicycles, some interviewees noted that it was challenging for YMMs to travel across certain terrains with them, especially if they are also carrying an infant.

These young mothers are at high risk of complications when they travel, not only because of their HIV status, but also because they are often carrying children and are possibly



Figure 5. YMM staff member outside the head office (photo provided by Zvandiri)

breastfeeding or pregnant. Long journeys over poor terrain, often in extreme conditions (e.g., seasonal flooding), also present challenging barriers for accessing healthcare services. As one interviewee noted, “In terms of the urban set-up, it won’t be difficult ... to implement because maybe there are shorter distances to the health facility ... In rural set-ups, it’s really different. Some areas do not have [mobile or Wi-Fi] network to attend ... [There are also] high distances from homestead[s], [so they] may have to climb a tree or mountain for network. Distances to health facility [they] may need to travel 20 or 30 kilometres without a bus or car.”

Access to mobile phone networks and Internet is a major concern for those in more rural areas, since the Zvandiri model includes SMS-based and WhatsApp check-ins and those with Internet have increased access to health information. One interviewee said, “I have noticed that those young mothers in an urban setting — they are actually way ahead in terms of information as compared to someone who is in the rural setting with limited or no information at all ... when

it comes to someone who is staying ... in an urban setting, [they have] many ways of getting information and sometimes support itself ... because it's not only support from someone [at home], but even over the phone [but this is not the case for rural mothers because] — most of our young mothers from the rural settings, they don't have phones."

Lessons Learned

We learned several vital lessons about the young mentor mothers (YMM) program, such as the importance of peer support, the importance of empowerment and holistic care, and the idea of "caring for the carer."

Peer Support's Value

Participants' narratives revealed that Zvandiri can improve physical health outcomes by increasing adherence to HIV healthcare support plans. The model's effectiveness is further optimized by recruiting YMMs from their community to provide peer support, which bolsters the participants' physical and mental health simultaneously. One of the greatest strengths of the YMM model for youth intervention is its unique focus on individualized care for its participants. Another is their promotion of mental health among their mentees, which is unique to their model compared to the standard healthcare services that the Ministry of Health and Child Care (MoHCC) in Zimbabwe provides.

Several of the interviewees emphasized that Zvandiri acts as the bridge between national healthcare providers/services and the communities who need access to these services most. While the Zimbabwe government's dedication to addressing HIV is important, their services face challenges in reaching and meeting the needs of hard-to-reach groups such as young

mothers living with HIV. This demographic group encounters a disproportionately high number of challenges in accessing health services, and the YMMs help to fill this gap by addressing their questions and needs through age-appropriate, culturally and community-sensitive peer mentorship. Involving local community members in peer support has reduced stigma in the community. In the words of one interviewee, "the other thing that has worked is that, you know, once one person or one man receives the information about the importance of being on PrEP and knowing their statuses and all, they share that message with other guys — with other men out there in their men's fora and all. And it's now working as a source of information dissemination."

Because they have gone through similar experiences as the young mothers registered in the program, the YMMs' personalized reminders and advice are well received by young mothers with HIV. This also serves to encourage the participation and engagement of young mothers in their own healthcare, which can improve medication adherence, trust in healthcare providers, and self-confidence. As one interviewee put it, "when the young women are supported by their peers, they are able to take better care of their children, they are able to adhere to treatment, and they normally know when to seek treatment or services when they have challenges in their lives. So, we find that for a young mother to know where to go — even if she doesn't know where to go — she knows I have a YMM who can support me, and if the YMM does not know how to support the young mother they always refer to the Zvandiri mentor or Zvandiri associate who are able to help. Also, we are able even to refer them to organizations that assist in that respective challenge that they are facing." Empathy is a priority for Zvandiri, and the YMM model is a valuable example of the integration of public resources to improve the lives of those hardest to reach.

Zvandiri's YMMs are particularly effective when it comes to providing peer support for other young mothers because of their shared lived experiences. Multiple interview participants highlighted that young mothers living with HIV require special attention and have particular needs that peer supporters in Zvandiri's broader community adolescent treatment supporters (CATS) program may not be as well-versed in. Having gone through the process of pregnancy and breastfeeding while living with HIV, "it's easier for [YMMs] to identify the challenges that these mothers are facing and then show them where to go, how to cope, how to live with HIV."

This shared experience also makes young mothers more likely to communicate sensitive health-related information with YMMs because there is less likelihood of judgment or misunderstanding. In this sense, receiving support from YMMs is "like having a friend to confide in." According to one participant, the YMMs are "more approachable than the other staff" in health facilities because of their young age and relatable backgrounds. In these ways, while YMMs have a similar set of duties to the CATS (counselling, referrals, adherence reminders, home visits, screenings, etc.), their similarity with young mothers allows them to better provide HIV-related care and services than when young mothers were cared for by the CATS or clinicians. YMMs demonstrate that there is real value in peer support between individuals with shared experiences.

YMMs also provide support for the infants and partners of the young mothers, and this holistic model of support is essential for preventing HIV transmission and ensuring the well-being of entire families (where possible). Zvandiri is currently seeking to expand on this concept through the creation of a young mentor dads program with similar qualities and objectives — a pilot launched in October 2021.

Empowerment and Holistic Care

Another lesson learned from our interviews is the importance of holistic care that engages not only the young mothers but also their families. Many individuals described the importance of support and care for the infants, partners, and household family members of the young mothers in order to minimize HIV transmission, improve adherence to treatment, and reduce familial stigma. Interviewees also noted that this family-based model is unique. For example, one interviewee noted that the "YMM program is unique in the sense that [we are] looking at the baby, the mother, and the father at the same time, unlike the CATS model which only focuses on one person ... the YMM program is just a good program whereby we'll be looking at your family as a whole."

In addition to extending support and services to the families of the young mothers, the program also provides services beyond HIV treatment and prevention. A key lesson learned is that, in order to improve treatment adherence among young mothers, YMMs need to consider the entirety of their lives, and thus refer them to appropriate services such as mental health support groups if unmet mental health challenges indirectly affect treatment adherence. In these support groups, leaders from the YMM program and MoHCC teach the young mothers about the importance of medication adherence, family planning, STI prevention, responses to stigma and violence, and mental health coping strategies. Interviewees note that this holistic approach to care has helped to empower young mothers living with HIV with necessary skills and services. "The YMM [program] is so effective in the sense that we have young mothers who are now empowered — who will know how to cope with their statuses — and they are linked to medical services that they need."

Another key lesson learned through interviews is that this program would not be as successful without the support of the government and

MoHCC. The implementation of a similar program in a new country would require similar degrees of involvement from government. An interviewee noted that “the program doesn’t work in isolation — it works in collaboration with the Ministry of Health. In terms of monitoring clients for viral load, babies on ART — they are led from the MoHCC facility, and then they are followed up ... So, there is a very close relationship between the YMM and the ministry because they work together.”

Caring for the Carer

Interviews with Zvandiri staff emphasized the importance of thoroughly considering the needs of the YMMs on an ethical and practical level. Described as “caring for the carer” by one staff member, this aspect of the YMM program focuses on supporting the personal needs of YMMs rather than only their needs related to their volunteering performance. This staff member said that Zvandiri “prioritizes health and well-being of YMMs” by actively encouraging their access to and use of counselling, viral load suppression, and cervical cancer screening, among other services. Zvandiri employees highlight that while YMMs are service providers to young mothers they are also young people living with all the same needs as the young mothers they support. From income concerns to viral load suppression, their shared needs mean that YMMs also require support for their well-being and, by extension, to build their capacity to perform in their mentorship roles. The carers need to be cared for.

The YMM program underscores the necessity of investing adequate time and training into YMMs, calling it crucial to the efficacy of the program. Economic strengthening and livelihood training, alongside YMM role-specific training, were flagged as necessary for helping YMMs to fulfill their roles while maintaining their own well-being. Building these well-trained and well-functioning systems develops foundations that support YMMs

as well as the long-term efforts of the YMM program without overexhausting volunteers. Zvandiri employees also highlighted how ensuring that YMMs do not have overwhelming caseloads (i.e., number of clients under their care) is key to this effect. Managing caseloads ensures that YMMs are fully capable of supporting young mothers they are assigned to work with and developing closer contact, ultimately furthering the program’s goals.

Conclusion

Our team sought to better understand the potential role of public-private partnerships in bolstering HIV testing and treatment among young mothers living with HIV by examining how Zvandiri’s YMMs encourage this group to access the testing and treatment services available under national plans in Zimbabwe. Based on 29 interviews conducted with Zvandiri staff and volunteers, we learned that peer supporters are most effective when they (1) have more shared experiences with their clients (e.g., with respect to age, gender, and HIV serostatus), (2) receive comprehensive support that promotes empowerment and all-around well-being for both the YMMs and mentees, and (3) receive adequate organizational support and resources to maximize the benefits for all of those involved, from carer performance to carer health and well-being.

The interviews we conducted suggest that some key barriers to the YMM program’s success include the impact of larger social and structural factors such as gender-based violence (GBV), food insecurity and subsequent malnutrition, and HIV-related stigma. GBV can affect a young mother’s adherence to HIV medication and access to clinic and counselling supports. Food insecurity and malnutrition have dangerous health consequences because young mothers who are malnourished may subsequently have higher

viral loads that threaten their health, as well as increase chances of HIV transmission to partners and potentially to babies and infants. Barriers to scaling up the YMM program to new regions or countries include limited funding, lack of resources, regional cultural differences, and rural and urban differences. Additional organizational funding could support more young mothers to register as YMMs, expand services to more rural communities, provide financial resources to address infant and mother malnutrition, increase service provision and accessibility by providing improved transportation options to YMMs, and improve the financial independence of the YMMs.

Pandemic Research and Other Limitations

Given the restrictions of the pandemic and time constraints, we were unable to interview non-English speakers, which may bias the responses we received. However, to improve the diversity of the responses, we interviewed a range of staff from a wide number of roles within the organization. We also conducted all interviews virtually and were limited by issues such as poor network connection and time zone restrictions. We used WhatsApp calling when needed to circumvent Zoom connection issues and rescheduled whenever issues of time zone restrictions or missed appointments occurred. We were also unable to interview stakeholders outside of Zvandiri (e.g., MoHCC employees,

individuals from similar organizations), so our interview responses included perspectives from people working or volunteering at Zvandiri only.

Remaining Questions

For future studies, it would be useful to investigate reconciling traditional cultural healing with allopathic treatment and to learn more about the young mentor dads program.

Future research might also consider:

- How can we reduce gender-based stigma and engage more men to help the YMM program in applying gender transformative approaches?
- How can our current research findings be extrapolated to better understand how the young mentor dads model could operate?
- How can Zvandiri maintain quality control as the project continues to grow?
- What type of sustainable funding would best benefit the participants within the program as well as the YMMs themselves?
- Do other programs exist that are similar to the YMM program? How do they compare with respect to delivery? How do they compare with respect to outcomes around the world?
- How can we support governments outside of Zimbabwe to understand the benefits of YMMs and to incorporate a YMM model into national health plans?

Research Team



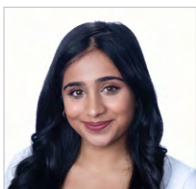
Jonathan Angell is a second-year undergraduate student at the University of Toronto, pursuing a double specialist in human geography and peace, conflict and justice. Jonathan is passionate about issues of migration and forced displacement and would like to pursue a career related to them in the future. He has previously engaged with HIV-related issues through a variety of academic projects on health equity in relation to HIV testing and treatment. Jonathan also has personal experience living in Sub-Saharan Africa, the broader region where Zvandiri operates, having spent two years in Kenya and three years in Nigeria.



Syeda Hasan is a third-year undergraduate student at the University of Toronto, double majoring in peace, conflict, and justice studies and criminology. Syeda's research interests focus on inequality in the criminal justice and immigration systems, especially with respect to the experiences of minority and racialized communities. She is a research assistant at the University of Toronto's Institute for the History and Philosophy of Science and Technology, researching the racialization of technology, and also a member of the Government of Canada's Immigration, Refugee, Citizenship Canada Youth Advisory Group.



Sharon Low is a master of global affairs candidate at the Munk School of Global Affairs & Public Policy. Sharon also holds a bachelor of science degree from Western University with a double major in political science and biology. Much of her academic studies and research were centred on political risk as a result of climate change, sustainability policy, as well as conducting qualitative interview-based research as part of her research into the political risk within Thailand tourism. She currently consults for a nonprofit organization based in Nigeria called TeachTrainEducate through Viewshift International, creating a donor network that supports employment training and education, as well as funding for mental health initiatives for girls at risk.



Lauren Tailor is a pharmacist (RPh) who received both her bachelor of science (BSc) and her doctor of pharmacy (PharmD) degree from the University of Waterloo in 2020. She is a recent master of public health (MPH) graduate in epidemiology from the University of Toronto's Dalla Lana School of Public Health (DLSPH) with a collaborative specialization in global health. She is pursuing a PhD in public health sciences (epidemiology) at DLSPH this fall. Her pharmacoepidemiology research will focus on mental health medication use in pregnancy and outcomes among offspring. Lauren's previous HIV-related research focused on the co-occurrence of sexually transmitted infections and mental health conditions among Ontarians using HIV pre-exposure prophylaxis (PrEP).



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The Reach Alliance began in 2015 at the University of Toronto as the Reach Project, a student-led, faculty-mentored, multidisciplinary research initiative. The Reach Alliance has since scaled to include the University of Oxford's Saïd Business School and Blavatnik School of Government, the University College London, and Tecnológico de Monterrey. Reach's unique approach uncovers how and why certain programs are successful (or not) in getting to some of the world's hardest-to-reach populations. Research teams, comprised of top students and faculty from across disciplines, spend twelve months investigating each case study. Once the data collection process is complete, teams write case reports that are published and disseminated across the Reach Alliance's diverse network of policymakers, practitioners, academics, and business leaders.

Inspired by the United Nations' call to eliminate global poverty by 2030 as part of a set of Sustainable Development Goals (SDGs), our mission is to pursue the full achievement of the SDGs by equipping and empowering the next generation of global leaders to create knowledge and inspire action on reaching the hardest to reach.



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