



Elizabeth Glaser
Pediatric AIDS
Foundation



ELTON JOHN
AIDS FOUNDATION



Improving the Health and Wellbeing of Adolescents in Urban Areas: An Elton John AIDS Foundation- funded Project

Elizabeth Glaser Pediatric AIDS Foundation end-of-project report



Executive Summary

Though much progress has been made to address the global HIV epidemic as a whole, adolescents and young people represent a growing share of people living with HIV worldwide. Adolescents are also less likely to be accessing HIV services than their adult counterparts, and AIDS-related deaths among adolescents have increased over the past decade while decreasing among all other age groups, which can in part be attributed to a generation of children infected with HIV perinatally who are growing into adolescence. To address the growing crisis of HIV in adolescents, specifically in urban areas of sub-Saharan Africa, the Elton John AIDS Foundation (EJAF) partnered with the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) from 2015-2017 to implement the two-year Reaching Adolescents in Urban Settings Project. The project was jointly implemented in Lusaka, Zambia and Kisumu, Kenya. The project worked toward meeting the following objectives:

- Increase awareness of and generate demand for HIV/AIDS and sexual and reproductive health (SRH) services amongst adolescents.
- Increase the identification of HIV-positive adolescents.
- Increase the number of adolescents receiving care, treatment, and support for HIV/AIDS and SRH services.
- Increase the number of HIV-positive adolescents who are retained in treatment and virally suppressed.

This report details project outputs across all objectives, by country. The report also contains a summary of a qualitative operations research study undertaken within the project, to describe factors that influence adolescents' decision to get tested for HIV, where adolescents receive information about HIV testing and what makes facilities "youth-friendly" to adolescents. Finally, this report includes lessons learned through implementation of the project, and both general and specific recommendations for future adolescent HIV and SRH programming.

Moving forward, EGPAF will continue our commitment to preventing new HIV infections among adolescents and increasing access to quality testing, care and treatment for adolescents living with HIV through advocacy, research and program implementation.

- **Advocacy:** As a co-convener of the "Start Free, Stay Free, AIDS Free" global initiative, EGPAF is working alongside UNAIDS, PEPFAR, the World Health Organization, UNICEF and other partners to galvanize momentum and action for adolescent HIV prevention, care and treatment.
- **Research:** In 2016 and 2017, EGPAF had five adolescent-focused publications in peer-reviewed journals, and is currently supporting 16 studies with an adolescent focus. These studies include assessing HIV risk among adolescents, barriers and facilitators to accessing services, clinical outcomes and monitoring drug resistance, as well as other areas.
- **Program implementation:** In 2016, EGPAF supported more than 60,000 adolescents with HIV services in 13 countries.



PHOTO: HEATHER MASON/EGPAF, 2016

Table of Contents

Executive Summary.....	3
Background.....	7
Kenya	9
Zambia	9
Program Objectives and Activities	10
Key Results by Objective	13
Operations Research Summary	16
Kenya Findings Summary	16
Zambia Findings Summary	17
Lessons Learned to Inform Current and Future Adolescent HIV Programming	18
Challenges	21



Background

Over the last 30 years, there has been significant progress in the fight against AIDS, and now more than ever, thanks to the efforts of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, and other international partners and governments, people living with HIV (PLHIV) have access to lifesaving medicines to help them survive and thrive. In fact, there has been a 30% decrease in HIV-related deaths globally between 2005 and 2012.ⁱ While there has been significant progress in the fight against AIDS globally, there is substantial work needed to reach adolescents who are affected by HIV or HIV-positive and are entering their childbearing years. HIV is the second leading cause of death for youth aged 10-19 worldwide, and without focused efforts on this population they will continue to succumb to this preventable disease.ⁱⁱ By the end of 2016, there were approximately 2.1 million adolescents living with HIV (ALHIV) worldwide. Approximately 84% of all ALHIV live in sub-Saharan Africaⁱⁱⁱ, with 60% residing in Eastern and Southern Africa.^{iv} Many of these ALHIV were perinatally infected with HIV, and have survived into adolescence. The majority of new HIV infections among ALHIV, however, are sexually transmitted, with adolescent girls at a much higher risk of contracting HIV than their male peers.^v

Adolescents aged 15-19 years are particularly vulnerable to inadequate HIV testing and linkage services in sub-Saharan Africa, where risk behavior is attributed to sexual activity and social stigma, especially during early pregnancy. For some time, research and reports have identified the general lack of youth-friendly health services, negative provider attitudes, and judgmental settings which prohibit early and effective access to HIV testing, prevention options, and quality treatment in public facilities. At the same time, many settings struggle to improve service packages in line with well-meaning policies for youth when burdened with high patient volumes, revealing the need for specialized training and opportunities to task-shift and optimize the role of peer leaders to improve facility care and critical community linkages.

Recognizing an urgency in formulating programs tailored to the needs of adolescents and alleviating barriers to these programs, particularly in urban settings, EGPAF, through support from EJAF, developed and implemented approaches to help alleviate the HIV epidemic in adolescents in Zambia and Kenya. EGPAF has extensive experience in both countries in implementation of programs for prevention, care, and treatment of HIV in children and families.

Kisumu, Kenya and Lusaka, Zambia were chosen as project locations based on the population and HIV prevalence among adolescents in these two cities, EGPAF's existing presence, and the desire to target urban settings. Lusaka is the largest city in Zambia and Kisumu is a commercial hub and the third largest city in Kenya, with populations of 1.7 million and 1.06 million respectively. In 2014 there were 3,479,000 adolescents (10-19) in Zambia and 9,912,000 in Kenya. According to *ALL IN to #EndAdolescentAIDS*, in Zambia there are an estimated 85,000 ALHIV with an estimated prevalence amongst male adolescents at 3.6%, compared with females at 5.7%. In Kenya there are 140,000 ALHIV with prevalence rates of 0.9% and 1.1%, in males and females respectively. As in many countries in sub-Saharan Africa, access to care and treatment services for ALHIV were constrained. For example, only 50% of ALHIV surveyed in the Nyanza Region of Kenya (where Kisumu is located) reported that they belonged to support groups for HIV-positive persons. In both Kenya and Zambia, guidelines for the clinical management of ALHIV had not yet been fully implemented, HIV testing services (HTS) was not routinely offered in school settings, and adolescents were not routinely being referred to testing sites.

ⁱ World Health Organization. HIV and adolescents: Guidance for HIV testing and counselling and care for adolescents living with HIV. 2013: viii.

ⁱⁱ WHO. Global update on the health sector response to HIV, 2014: p16.

ⁱⁱⁱ UNAIDS data 2017

^{iv} Kasedde, Susan, Chewie Luo, Craig McClure, et al. 2013. "Reducing HIV and AIDS in Adolescents: Opportunities and Challenges." *Current HIV/AIDS Reports*.

^v Ibid.



Kenya

In 2015, approximately 51% of all new HIV infections in Kenya are among adolescents and youth aged 15-24^{vi}. As of 2015, AIDS was the leading cause of death and morbidity among Kenyan young people. While HIV prevalence among Kenyan boys and girls is virtually the same among adolescents aged 15-19 (0.9% for male adolescents and 1.1% for female adolescents), HIV prevalence among Kenyan young women aged 20-24 is 4.6%, four times that of Kenyan young men the same age (1.3%). Nationally, a total of 435,224 adolescents, between the ages of 15-24 were HIV-positive in 2014; 119,899 are thought to be HIV-positive but not yet identified, while 315,097 adolescents are in need of antiretroviral therapy (ART) (72%).

In Kisumu County, where EGPAF implemented the project, there were an estimated 37,110 adolescents (aged 15-24) living with HIV; of whom it was estimated that 7,745 had not yet been tested for HIV and identified as HIV-positive and 26,719 adolescents are in need of ART (71%).^{vii}

Access to and uptake of HIV services throughout the HIV prevention, testing, care, and treatment cascade including HTS among adolescents, has been limited in Kenya. In 2014, only 23% of adolescents aged 15-19 knew their HIV status, while only 50% of Kenyan adolescents aged 15-19 had ever been tested for HIV. In 2014, 141,014 had a known HIV-positive status, yet only 38,717 (27%) were receiving HIV care services, and only 34,846 (24%) were receiving ART^{viii}.

Zambia

A total of 38,449 adolescents between age 15-19 were HIV-positive in 2014 in Zambia; of them, only 24,678 (65%) were enrolled on ART. There are 257,282 adolescents (15-19 years of age) in Lusaka District, where EGPAF's EJAF-supported work was focused. As in Kenya, access to the HIV prevention, care, and treatment cascade is constrained in Zambia. In Zambia, guidelines for the clinical management of ALHIV have not yet been fully implemented and previous adolescent guidelines were not implemented successfully on a wide scale. HIV testing and counseling is not routinely offered in school settings and adolescents are not routinely being referred to testing sites.

There is a need to improve HTS availability for adolescents in both countries, specifically in the two targeted cities. Through generous EJAF funding, EGPAF launched the Improving Health and Wellbeing of Adolescents Project in Kisumu and Lusaka. The project offers an innovative approach for intensified HIV case finding and improved uptake of and retention in HIV services among adolescents to stop HIV transmission, identify HIV-positive adolescents, and link them to HIV treatment. The evidence generated from this project and illustrated in this report will support EGPAF's organizational strategic thinking around preventing and treating HIV in adolescents. EGPAF will use and share this evidence with partners working to improve adolescent HIV services and treatment throughout the areas in which we work. This project will create a platform for action to inspire a social movement to drive better results with and for adolescents, contributing to global initiatives which will effectively reach a vulnerable population.

^{vi} Kenya National AIDS Control Council. Kenya AIDS Progress Report, 2016

^{vii} Kenya National AIDS Control Council. Kenya's Fast-track Plan to End HIV and AIDS Among Adolescents and Young People. September 2015. Accessed on June 3rd 2016. http://www.nacc.or.ke/images/documents/Kenya_Fast_Tack_Plan_to_End_Adolescents_AIDS_and_Young_People.pdf

^{viii} Kenya HIV Estimates 2014

Program Objectives and Activities

The goal of this two-year dual-country project, launched in 2015, was to improve the well-being and quality of life of adolescents 15-19 years of age through expansion of and access to quality HIV and AIDS prevention, care, and treatment services within the context of national health and development programs. The project pursued multiple activities to accomplish this, including; development of age-appropriate messaging and use of different messaging platforms (such as national and local media campaigns and SMS text messaging); deployment of peer-led support interventions; stronger linkages between schools, communities, and health centers; and increased capacity to deliver HIV care offered at supported health centers in each country.

The four objectives of the project included:

1. Increase awareness of and generate demand for HIV/AIDS and sexual and reproductive health (SRH) services amongst adolescents.
2. Increase the identification of HIV-positive adolescents.
3. Increase the number of adolescents receiving care, treatment, and support for HIV/AIDS and SRH services.
4. Increase the number of HIV-infected adolescents who are retained in treatment and virally suppressed.

In Kisumu, EJAF-funded activities were implemented originally in 16 low-volume health centers where EGPAF had direct services delivery presence and was later scaled up to a total of 40 sites, including many high-volume sites where EGPAF did not have prior presence. In Lusaka, 20 Ministry of Health (MOH)-supported, high-volume sites implemented the project. Site level interventions involved provision of technical assistance to improve clinical care, development of peer support activities, improving community-facility linkages, expanding HIV and sexual health messages to adolescents, and identifying and customizing youth-corners with dedicated youth-friendly service delivery. Specifically, EGPAF offered capacity-building opportunities for health care workers (HCWs) to manage young patients, tracked adherence to clinic appointments and ART medications by adolescents in supported facilities, identified and trained peer facilitators to provide peer-led care and improve linkage with communities and facilities, worked with schools to fill gaps in school/facility linkages, and identified bottlenecks and developed response actions to improve adolescent use of services in all supported sites.

Under this project, EGPAF developed age-appropriate messaging on HIV and SRH; led the design of social media/SMS platforms; engaged in community activities to promote this work to adolescents and motivate them to be tested for HIV; and promoted long-term health-seeking behaviors. Peer ambassadors were engaged in the design and implementation of these activities to increase the demand for services and facilitate peer support for ALHIV served in project sites. EGPAF developed a comprehensive and evidence-based approach to improve the well-being and quality of life of adolescents between the ages of 15-19.

In February 2017, EJAF staff visited the project sites in Kenya and Zambia, and Vitol Foundation staff visited Kenya project sites, to review the project performance. During the debriefing, it was noted that EGPAF-Zambia was on track to reach HTS and identification targets, however, there was a need to strengthen peer-led activities, retention to care and treatment, community-facility linkages, and documenting viral suppression. Kenya was also on track to meet project HTS targets and peer-led activities, but had very low yield. To address the areas needing improvement, EGPAF held a refocusing workshop in Nairobi, bringing together project staff from both countries, the global technical assistance team from Washington D.C., and EGPAF-Kenya senior management team to refocus the project scope in order to improve yield and suppression rates, while exploring promising practices at the global level. The team strategized on

what programmatic and budgetary changes and new ideas needed to be injected into the program. Key among them in Zambia was to enhance linkage through peer leaders, training of HCWs and adolescent peer leaders, targeting adolescents through friendly content on social and mass media (through *Tikambe*, a program of BBC Media Action), and engaging the MOH to minimize the turn-around time for viral load testing results. In Kenya, the targets for HTS were revised and an optimization strategy agreed upon to increase the yield and to double the number of supported health facilities to replicate the treatment adherence that had led to increased viral suppression among adolescents.

Training of professional and lay health facility staff

EGPAF acknowledged that not enough health workers were adequately prepared to provide adolescent-responsive services and operationalize key policies and guidelines. Both Kenya and Zambia have well-designed youth-friendly health service policies, which include adolescents. However, few public facilities have the human resource capacity to proactively identify new patients, serve relatively small cohorts of adolescents living with HIV, or manage complementary peer-led and adolescent-focused outreach into the surrounding community and schools. In Lusaka, capacity building was important to achieve project targets, thus trainings and mentorship sessions were provided to both clinical and non-clinical staff at various levels. 150 peer educators, 20 Nursing Officers in-charge, 20 ART in-charges from the 20 facilities, and 19 broadcasters from *Tikambe* were trained in the provision of adolescent-friendly services. In order to achieve government buy-in, all trainings were facilitated by staff from the MOH in line with national training standards.

In Kenya, the project trained 16 clinical, adolescent-focal staff in project supported facilities. These staff are key in implementing adolescent-friendly HIV services (AFS) and the Adolescent Package of Care (APOC). Additionally, EGPAF trained 143 peer ambassadors and 62 teachers on facilitation, leadership skills and AFS using the *Tuko Pamoja*, a life skills curriculum for adolescents and young people.

Involvement of Health Cadres	
Professional	Doctors, Clinical Officers, ART in-charges, Nurses, Nursing Assistants, Counsellors
Lay	Peer Educators, Peer Leaders, Peer Ambassadors, HTS Counsellors

Identification, training, and deployment of peer leaders

Each project trained and supported youth peer leaders (up to 24 years old, living with HIV, and experienced in HIV care) and ensured adolescents were meaningfully involved at all stages. During implementation, EGPAF equipped the adolescent peer leaders to run almost all aspects of the project with the guidance of facility-based HCWs. The peer leaders facilitated psychosocial support (PSS) groups, conducted facility and community testing, staffed the adolescent friendly corners, and directed their peers through the information/triage desks to facilitate easy referral.

As part of its strategy in expanding HIV awareness and service demand creation, the project engaged a team of trained peer leaders, who included peer linkage officers, peer ambassadors, and peer educators, as project outreach workers. The

peer leaders played the role of mobilization for services uptake, as well as conducting peer-led adolescent sexual and reproductive health (ASRH) information dissemination either through one-on-one interactions or group sessions. The linkage officers conducted same-day linkages for ALHIV to HIV care and provided triage in facilities. The ambassadors augmented the work of adult peer educators during PSS groups, allowing adolescents the opportunity to lead the sessions while the peer educators conducted life skills sessions in the community. EGPAF adopted a task-shifting approach to reduce the shortage of HIV testing providers by training and deploying 67 adolescent peer educators as HTS providers at the health facilities in Zambia.

In Kisumu, EGPAF supported the training of peer educators to support community mobilization and implementation of the program at the facility, community, and school levels. These peer educators were attached to the 31 schools to act as buddies to adolescents living with HIV and also facilitate all the learners within the schools to have basic knowledge on sexual health, and HIV testing, care, and treatment. Peer educators worked closely with the Project Officer – Community Liaison and the 62 teachers (two per school) targeting a cumulative learner population of 13,221 (male: 6,169; female: 7,052). Some of the strategies that peer educators used included:

- School-wide Assemblies (“town hall meetings”) – the peer educators supported the schools to hold at least three dialogue sessions per school term targeting the entire learner population where specific topics around sexual and reproductive health were discussed. The dialogue sessions offered an opportunity for learners to demystify misconceptions around sexual health and HIV. These forums offered learners an opportunity to learn about the nearest health facilities, and where they can access HIV testing and get clinical support if they were HIV-positive.
- In-school health clubs, through which learners had bi-monthly discussions about their health and received training to become support groups among learners living with HIV. The peer educators, together with the club leaders, worked with the school administration to create an environment that allows learners to get school support through boosted nutrition, flexible hours for adhering to drug schedules, access to health facilities, and at times, having the peer educators or a friendly teacher to support drug refills.

Broader messaging to enhance service demand (media campaigns and messages delivered via peer ambassadors)

Adolescents respond to both large-scale and one-on-one strategies for health messaging and demand creation for HIV and SRH services. In Lusaka, EGPAF sought partnership with Tikambe to reach out to the adolescents. EGPAF provided the experts and ambassadors, as well as the scripts, for the weekly shows while Tikambe provided the platform that included radio shows, an interactive social media platform, and outside/outreach activations in the compounds. The incorporation of adolescent dance groups, drama groups, adolescent speakers, and adolescent counsellors in outreaches was an effective way of delivering ASRH messaging to adolescents.

In Kisumu, a mix of both ALHIVs and adolescents of unknown HIV status were engaged in the process of developing revised HIV and ASRH messages, from initial messaging ignition through to production and dissemination. Adolescent ideas, thoughts, and feelings were captured and tempered with expert advice of Ministry of Education (MOE), MOH, community service organization partners, and health communication experts drawn from partner organizations. EGPAF headquarters provided technical review and the messages were translated in English, Kiswahili, *Sheng* (local Kenyan slang), and *Dholuo*. In Kisumu most adolescents have access to smart phones and the internet, so EGPAF, in collaboration with the peer leaders, created Facebook pages and WhatsApp groups for disseminating adolescent ASRH messages. The EGPAF team oversaw messaging content and material but encouraged the adolescents to share their views and learn from each other. Adolescent theatre groups were also identified to help in passing messages through interactive plays, skits and other forms of entertainment.

Real-time data of HIV testing and support services

In June 2016, EGPAF began the use of a mobile-phone based data management application, the Open Data Kit (ODK) in the Kisumu project, which previously was mainly used as a platform for collecting survey data during studies. With EGPAF technical support, the project reconfigured the ODK to collect data from various service delivery points in health facilities, administered by healthcare providers without the need for input from information technology or strategic information and evaluation staff. The project pioneered this technology with the collection of all HIV service data, including HTS. All focal health facility staff attended ODK orientation sessions and received assistance with installing the application on their phones. The staff transmit this data into a central repository, reducing paperwork and improving data accuracy and integrity. The ODK was also used to collect data during a baseline assessment of the 24 new sites after the project refocus.

Key Results by Objective

Objective 1: Increase awareness of and generate demand for HIV/AIDS and sexual and reproductive health among adolescents

In Lusaka, EGPAF reached 137,845 adolescents (144% of the project-life target) with targeted HIV and SRH messages of which 95,976 were through national media campaigns in partnership with Tikambe, 5,900 through adolescent-friendly corner interventions and 35,969 through community outreach events conducted by peer ambassadors. To improve on the appropriateness and accuracy of messages and content delivered by Tikambe Media Platform, EGPAF trained 19 staff involved with the production of their shows to ensure appropriate content development to reduce HIV and SRH stigma for teen audiences. Additionally, the project reached 198,698 indirect beneficiaries as part of creating awareness on HIV and SRH messages and services.

In Kenya, 152,136 adolescents (255% of project lifetime target) and 27,496 indirect beneficiaries were reached with HIV and ASRH messages. Additionally, 143 peer ambassadors and 62 teachers who were trained on facilitation and leadership skills continue to provide support to the project. The project is now working with schools to strengthen adherence among ALHIVs and create a supportive school environment for treatment.

The project supported adolescent sexual reproductive health activities in 31 schools within Kisumu East, West, and Central sub-counties of Kisumu County. In consultation with the County Director of Education, the schools were identified based on challenges the students were experiencing and how close they were to health facilities. Before entry into the schools, this project organized a sensitization workshop targeting school heads and administrators that brought together 67 (M=38; F=29) MOE staff based in Kisumu County, which included the three sub-county directors. Further demand creation was achieved through ongoing sessions in schools through trained teachers, resulting in ASRH message delivery and referrals to health services.

Objective 2: Increase the identification of HIV-positive adolescents

Through the Lusaka project, EGPAF sensitized all health facilities involved in the project on optimization and oriented HIV testing service providers on provider-initiated testing, counseling, and index client testing. EGPAF focused on optimization of HTS at all service delivery points in health facilities and through targeted community outreaches. A total of 28,463 adolescents were tested for HIV in the Lusaka project. Of those tested, 1,492 adolescents were newly identified as HIV-positive. The project successfully linked 1,447 of the newly identified adolescents living with HIV to HIV care, achieving a 97% linkage rate.

Through the Kisumu project, EGPAF combined the optimization of HIV testing at health facilities and targeted community HTS outreaches for increased yield. Additionally, the use of the ODK platform helped with real time reporting of newly-identified HIV-positive adolescents to be followed up for improved linkages. This resulted in 74,235 adolescents being tested for HIV as of the end of August 2017. This is a 93% achievement of the revised target for HTS of 80,000. A total of 287 out of the target yield of 250 (115%) adolescents were newly diagnosed with HIV. There was 88% linkage and 76% initiation into ART for the newly diagnosed adolescents.

Objective 3: Increase the number of adolescents receiving care, treatment and support for HIV/AIDS and sexual and reproductive health services.

In Lusaka, EGPAF improved coverage of AFS from 10 (in November 2016) to 19 by end of project, of the 20 targeted sites in the project (90%). The project trained 150 peer ambassadors and oriented 60 of them on HIV testing optimization through provide initiated testing and counselling and index testing. Apart from the health facility-based PSS groups, EGPAF established six community support groups to ease facility space burden. EGPAF clarified the role of peer ambassadors in defaulter tracing as well as follow up/home visits to adolescents living with HIV to support adherence. Ninety percent of the supported health facilities are now providing AFS) and all facilities have active PSS groups. A total of 82 ALHIV were referred and received SRH services including modern family planning (FP) methods; this was done through SRH education at youth friendly corners, referrals and condom distribution.

All 20 facilities in Zambia supported through this project had active support groups that were facilitated by peers; this contributed to a 90% ART retention rate since the inception of the project, as of June 2017. The PSS groups met once per week and had sessions on different topics on HIV, such as adherence, positive living, etc. The project also scaled-up adolescent-friendly locations within each supported site. As of the end of the project, 19 supported sites had adolescent-friendly corners promoting access to services among this demographic. On average, 100 adolescents accessed adolescent “information desks” at each health facility each month.

In Kenya, EGPAF worked with the 18 peer linkage officers to initiate 218 (76%) of the 287 adolescents newly diagnosed with HIV on ART. Through the expanded sites, the project increased the number of ALHIV currently in HIV care and on ART from 114 to 854. A total of 836 adolescents have been retained in care in the 40 facilities, while 92 have transitioned to adulthood, 10 have transferred out, six were lost to follow up, and seven defaulted. As part of providing differentiated care to ALHIVs, EGPAF supported the creation of adolescent-focused PSS groups in 40 health facilities and four community catchments. In a “supermarket approach” the PSS groups are organized on weekends to also act as clinic days where individualized care is provided to the adolescents, as well as group therapy through the PSS group meetings, giving adolescents an opportunity for treatment literacy and psychosocial support. This reduces appointment fatigue for stable clients, as all necessary services are provided in one monthly visit.

Objective 4: Increase the number of HIV-positive adolescents who are retained in treatment and virally suppressed

In Lusaka, EGPAF supported monthly data review meetings to improve quality of care of adolescents living with HIV, with data analysis occurring throughout the cascade. Project staff also worked with facilities to establish continuous quality improvement teams to support data review and decision making. 105 ALHIV have been transitioned into adult care. The project recorded improved turn-around time for viral load test results after consultations with MOH and implementing partners. A total of 855 adolescents have had viral load testing done and 722 received viral load test results to-date. The project recorded 49% viral suppression among ALHIVs. This rate is above the recent Zambia Population-based HIV Impact Assessment (ZAMPHIA) data showing viral suppression rates of around 35% for the 15-24 age group.^{ix}

In Kenya, EGPAF increased the cumulative viral suppression rate from 63% at baseline to 75% which is significantly higher than the Kisumu County rate of 66% viral suppression among adolescents. There was higher viral suppression among adolescents out of school (92%, n = 282), compared to among adolescents in school (66%; n = 559). EGPAF is working with the MOE to facilitate improved adherence among learners living with HIV in schools. EJAF's collaboration with the MOE to provide support to the implementation of adolescent HIV prevention, care, treatment for adolescents aged 15-19 in 30 schools in Kisumu County, resulted in sensitization of 60 school heads and administrators, 30 guidance counselors, and supported implementation of directly observed treatment support (DOTS) programs in their schools. Across eight schools, the heads and administrators took charge of supporting learners living with HIV to take their drugs on time. These administrators established drug cabinets, ensuring safe storage of ARVs in their schools and facilitating ART adherence through reminders and providing psychosocial counseling through their guidance and counseling teachers. By establishing school-health facility linkages, Ober Kamoth Sub-county Hospital created a relationship with Point of Grace Academy, sensitized the school administration, provided mentorship to the school matron on differentiated ALHIVs care and conducted weekly technical assistance visit to the school. Out of 18 ALHIVs in the school whose viral load samples were taken by June 2017, all the 18 had virally suppressed, a 100% viral load suppression rate. EGPAF is currently working with the MOE, National AIDS and STI Control Programme (NASCOP), National AIDS Control Council (NACC), and the National Adolescent Task Force to develop and implement a "National Teachers Guide of Support to Learners Living with HIV."

^{ix} http://phia.icap.columbia.edu/wp-content/uploads/2016/09/ZAMBIA-Factsheet.FIN_.pdf

Operations Research Summary

EGPAF completed a mixed methods study across both country settings seeking to understand current utilization of HIV services by adolescents and how to strengthen HIV services for adolescents and make them more youth-friendly. Qualitative data provided information about factors that influence adolescents' decision to get tested for HIV, where adolescents receive information about HIV testing, and provides critical information about what makes facilities perceived to be youth-friendly by adolescents. Qualitative data was collected through focus group discussions (FGDs) with two sets of adolescents aged 15-19 years old; 1) HIV-positive adolescents enrolled in support groups at selected facilities and 2) adolescents of unknown HIV status who are part of the youth groups within the community. Results will be shared with the MOH and other implementing partners and stakeholders.

Kenya Findings Summary

Perspectives about the facility

Adolescents reported that the facilities help people to lead healthy lives, and were comfortable using them because their privacy is prioritized. The direct connection to care and medication as well as the HIV and SRH education were valued aspects, especially in comparison to testing services located outside of the facility. However, some adolescents didn't feel comfortable using the facility due to fear of stigma and fear of HCWs gossiping about their status.

HIV testing barriers

Adolescents reported various fears about being tested for HIV, including receiving a positive result, the needle used for the test, what steps they should take if they found out they were HIV-positive, having to start ART and experience side effects, and discrimination. Peer pressure and age of consent were also noted as barriers.

HIV testing facilitators

Many HIV-positive adolescents and adolescents of unknown status reported that their parents brought them to be tested and provided support when results were received. Encouragement from friends, schools and religious communities were also noted as facilitators, as was the availability of testing at every service point.

Transition to adult care

Most HIV-positive adolescents reported that transitioning to adult care has never been discussed with them. Though some adolescents felt they will be able to use the education they have now as adults, some want to be taught more about transitioning to adult care.

Sexual and reproductive health

Though some adolescents felt that their HCWs encouraged family planning, some reported they had not been taught anything about family planning and some reported even being discouraged from seeking family planning services.

Recommendations

Respondents recommended that information targeting adolescents be provided through media and entertainment sources, such as radio, television, and social media. Other venues including community and school events, sports events, mobile solutions, and youth-

friendly corners at facilities were also recommended to improve adolescent outreach. Many adolescents recommended providing adolescent-specific services, such as adolescent-only days and adolescent support groups, to encourage and support adolescents' use of HIV services.

Zambia Findings Summary

Perspectives towards the health facility

Many HIV-positive adolescents reported feeling cared for at facilities, and enjoyed programs hosted by the facilities, particularly support groups, HIV education, youth friendly corners, and condom and medicine distribution.

Some HIV-positive adolescents felt that clinics do not do enough to link adolescents to services, such as counseling, and worried about stigma and judgement from HCWs.

Youth-friendly corners

HIV-positive adolescents viewed youth-friendly corners as supportive spaces. Additionally, some youth-friendly corners distributed condoms and information about sexual reproductive health. Adolescents provided recommendations to improve youth-friendly corners, such as making them more private and friendly, providing refreshments, and stocking corners with more educational materials.

HIV testing barriers

Fear and uncertainty prevented some HIV-positive adolescents from accessing HTS. A lack of support and information served as a barrier for adolescents of unknown status. Fear of discouragement from HCWs, parents and peers were also mentioned.

HIV testing facilitators

Adolescents reported receiving information about HIV-testing from health care facilities and mobile outreach programs, and felt that most people within their community encouraged HIV testing. Adolescents of unknown status were also familiar with self-testing services within their community. Supportive family members and peers were noted as facilitators, as were facility resources such as counselors, and community programs such as door-to-door testing.

Sexual and reproductive health

Adolescents of unknown status frequently reported feeling uncomfortable accessing SRH services, and study participants described being denied access to condoms and other services by HCWs and school supervisors because of their age. Counseling services have helped HIV-positive adolescents learn about the importance of protecting their intimate partners.

Recommendations

Study participants provided recommendations for health care facilities to improve service delivery including bringing services closer to the community, issuing reminders about upcoming appointments, and providing refreshments and transportation reimbursements. Other recommendations included offering testing services in other community locations, such as schools or corner stores, and making services free of charge. HIV-positive adolescents recommended that health-care facilities offer more counseling services, and provide counselors with more in-depth training. Adolescents also suggested engaging diverse members of the community, including parents and influential community members, to encourage their peers to access HIV services.

Lessons Learned to Inform Current and Future Adolescent HIV Programming

Address the full spectrum of adolescent needs.

Though the need for a comprehensive holistic approach was known at project inception, it cannot be overstated that adolescents face complex emotional, physical, and psychosocial stressors, and HIV is only one component of their lives. Effective HIV programs need to take this into account, and establish more effective linkages to support the full spectrum of needs of adolescents.

Capacity-building among health care workers to identify and manage HIV in adolescents was needed in most supported sites and was well-received among health facility staff.

Through focused trainings, health facility staff and managers received knowledge of the standard of care for adolescents, and allowed facilities to ensure adolescents received AFS at all supported delivery points, according to the Kenya Adolescent Package of Care. The positive outcomes of these trainings were seen through site-level implementation of various AFS; for instance, implementation of adolescent desks within triage where adolescent clients were fast-tracked for attention in Zambia, Saturday services, and refurbished adolescent corners where adolescents could receive HIV and SRH counseling and services in one location in both Zambia and Kenya.

Youth engagement in ALHIV care is essential.

Peer leaders implemented support groups and PSS activities on clinic days in both countries. Peer leaders were advisors on Kenya activities and in Zambia played an active role in testing patients. Peer leaders, as ALHIV and volunteers, also need to be supported in their own HIV care, tracking viral suppression, and accessing resources that will support their treatment. The peer leaders were the primary participants in development of HIV and ASRH messages in Kenya, actively supporting dissemination and diffusion. This engagement increases both uptake of services and general ownership of project activities.

HIV testing increased yield through optimization of peer support networks.

By identifying peer leaders and training these leaders to also offer HIV testing in Lusaka, the burden of increasing HIV testing yields among busy health workers was alleviated. As of July 2017, 1,010 adolescents were tested through peer leaders in Lusaka.

Adolescents tend to congregate within specific “social spaces” including churches, markets, and sports fields, to socialize and have fun. Peer leaders worked with EGPAF to help identify these locations and conduct targeted community HIV testing to these sites from May 2016 to October 2016.

Peer leaders are an invaluable resource in scaling-up HIV testing, prevention, care, and treatment services among adolescents and should be compensated appropriately for their hard work.

The ability to scale-up appropriate health services to adolescents heavily relies on collaboration with informed peers. These peer leaders worked hard with facilities and needed proper incentives to continue their hard work. In Lusaka, incentives were provided to all 60 peer leaders who were actively involved in HTS across the 20 facilities. Incentives included monthly transport refunds and apparel needed for community activities. In Kenya, the peer leaders also received a monthly stipend.

Networking and partnerships in policy and media can have lasting effects.

Partnering with Tikambe in Zambia allowed EGPAF to broaden its reach to adolescents in nearby communities with accurate HIV and SRH messages. EGPAF had expected the need to pay for this type of exposure; however, that was not necessary. BBC Media needed content and experts for their planned shows and a collaborative shared goals relationship was formed. Tikambe provided the platform (radio shows, social media platform and outreach activities). Through this partnership with Tikambe, EGPAF was able to reach 95,976 adolescents as of July 2017.

Partnering with the MOH on this initiative was invaluable. In both countries, EGPAF became involved in creation and sustenance of the Adolescent Health Technical Working Group, which allowed EGPAF to share best practices of the program for local scale up and ensure sustainability of this work.

Adolescent-focused differentiated service models (DSD) including weekend clinics, integrated PSS group meetings, and outreach events need to be customized to the routine schedule of a school-aged adolescent.

Both Zambia and Kenya were able to increase access to ALHIV care by offering various DSD interventions including weekend services. The project enabled a half-day of packaged PSS and clinical care monthly at supported sites, held on a Saturday. While Saturday services were appreciated and used; ALHIV not using these sites wanted convenient drop-in access and shorter wait times for provision of services. Facilities determined the design of PSS and engagement of treatment supporters in Kenya; which meant facilities could hold PSS group sessions with caregivers/parents, partners, or just the adolescents. Facility leadership determines the care model in low volume sites and that likely influences patient use.

This project tailored its PSS group meetings and clinic days around the schedule of school-age adolescents, which optimized the number of participants attending these events. The incorporation of adolescent dance groups, drama groups, adolescent speakers, and counsellors in outreach activities was an effective way of delivering HIV and sexual health messaging to adolescents. It was an avenue for health education that helped to sustain their attention. During these outreach events in Lusaka, a total of 5,590 information, education and communication (IEC) materials were distributed and the project team was able to reach 198,698 indirect beneficiaries (adults older than 15 years, and adolescents younger than 15 years) with HIV and SRH messages as of August 2017. In Kisumu, adolescents were engaged in the development of health messages which included the participation of MOH, MOE and community service organization partners. These messages were disseminated through life skills sessions, community dialogue, social media platforms, and community events and through IEC materials. A total of 10,000 fliers, 3,000 posters, 250 t-shirts, and 250 wristbands were produced and distributed.

Challenges discussing SRH.

SRH is a challenging clinical component. Many barriers remain both for providers and patients. For ALHIV, especially perinatally infected adolescents, providers are seen as parents and caregivers; as patients they cannot admit sexual activity. For providers, they often see the only appropriate contraceptive method for ALHIV as condoms. Providers do not have the time to counsel on contraceptive options, change clinic models to provide FP at HIV clinic settings, the attitude to imagine that ALHIV are having sex, or may want their own family in the future. Implementers can only encourage and support adolescents to access HIV and sexually transmitted infection testing and discuss sexual health with providers when providers are trained to respond in a sensitive, non-discriminatory way. Further provider training is needed around SRH and contraception options for ALHIV.

More research is needed to understand why adolescents in school are not showing higher viral suppression rates.

It is thought that involving schools and school administrators in the care of adolescents living with HIV can promote viral suppression. Many see a MOE-collaborative HIV intervention as extremely useful, but when implementers use the term ‘school outreach’ what they really mean is that they are entering schools in a way to de-stigmatize ALHIV identification around clinic catchment areas. There is no evidence to say that messages of SRH have any impact on HIV risk. Through working in schools in Kenya, the project supported innovative pilots on DOTS for improved adherence. Establishing school-health facility linkages allowed adolescents an extra layer of support to take drugs as prescribed. The viral suppression rate noted at schools which took an active role in caring for adolescents living with HIV (e.g., Ober Kamoth Sub-county Hospital with Point of Grace Academy witnessing a 100% viral load suppression rate among learners living with HIV) is a testament to strong positive effect of this collaboration. EGPAF/Kenya has been awarded an oral presentation on this intervention, titled “School-based Directly Observed Therapy increases the rate of Virological Suppression among Adolescents in Rural Health Facility in Kenya” at the upcoming ICASA 2017 conference in Abidjan, Cote d’Ivoire.

Take advantage of current technologies; use of phone-based open data kit technology for HIV testing and counseling reporting.

Through this technology, the project has realized a great opportunity for real time data reporting and analysis, day-to-day decision making, weekly reporting for ease of monthly report consolidation, and early initiation into ART for newly diagnosed ALHIVs and better reporting rates from health facilities.

Challenges

Identification of HIV-positive adolescents:

While many adolescents accessed HIV testing as a result of the project, there remains questions about how to achieve optimum case identification. It's unclear if achieving and surpassing testing targets, along with an intensive package of interventions, hindered our ability to really understand the testing barriers of this population and work to address them in a systematic way. EGPAF noted missed opportunities for identification and initiation of adolescents into ART despite a potential for high yield. Weekly missed opportunity tracking was done by HTS providers in collaboration with the peer linkage officers whose main role was ground mobilization. Through this effort, in Kisumu, the program accounted for all missed opportunities including those who declined linkage, as well as those who preferred linkage to sites not under the project scope.

Viral load monitoring:

Viral load testing is a challenge in both country settings and it was difficult to track this indicator across sites. Both Lusaka and Kisumu received most viral load results toward the end of the project period, leaving little time to address the patient-level needs to improve adherence and if needed raise the possibility of treatment resistance. It is notable that even with the best adherence support, most of the suppression among slow-progressing adolescents will be realized beyond the project lifetime. It is therefore not easy to give a complete account of suppression for all the adolescents current on care.

Reliable data for decision-making:

In Kenya, the project started with target for yield at 11%, based on available data at the time of project design. Spectrum data later showed much lower projections for HIV-positive yield in the project settings. The lower than targeted yield of HIV-positive adolescents led to a mid-project refocusing of activities and revision of targets. The revised targeted yield was 0.4% over the project lifetime.

Mobilizing adolescents where they are found:

Both Kenya and Zambia identified that large groups of adolescents could be found in schools for SRH mobilization and HIV testing, however policy restrictions prohibit direct implementation of topics and testing on school properties.

MOE policy restrictions:

During the life of the project, there were difficulties in penetrating schools to provide HIV services, particularly in Kenya. Most affected was HTS, as MOE leadership did not allow access to schools to provide HTS unless services were provided outside the school compounds. Much as the weekend outreaches provided an opportunity to reach only day-scholars, most of ALHIVs in boarding schools remained unidentified.

Ensuring coverage of services beyond public facilities:

With EJAF support, EGPAF was able to involve faith-based organizations and private facilities. Over the life of the project, a number of private facilities did not cooperate with the project in implementing AFS because most of them, being profiteering ventures, saw AFS as non-profitable. In Kenya, a mid-line review was conducted and five such private facilities were dropped and replaced. The project also had approached a number of faith-based organizations whose leadership did not approve of the idea of working with EJAF, citing the donor's liberal views on HIV/SRH. This consequently affected the project's projection on total ALHIV in care in Kisumu.

Next Steps and Recommendations for Adolescent HIV and SRH Programming

EGPAF's adolescent programming is based on our commitment to inclusive, evidence-based, and high-quality programming. EGPAF's adolescent strategy includes nine areas of focus: HIV prevention, provision of quality services for adolescents living with HIV, strengthening community and facility linkages, innovating, advancing the adolescent research agenda, data use to inform programming, supporting effective adolescent-centered policies, advocating for the prioritization of adolescent health at the regional and global levels, and documenting and disseminating our work to inform future programs. In 2017 and beyond, EGPAF will continue to prioritize the expansion of adolescent HIV services in our programs and contributing to the global adolescent HIV agenda. Moving forward, EGPAF will utilize learnings gained during implementation of this award, as well as other adolescent-focused projects, to inform future programming, with a focus on the following:

- 1) Connecting provider capacity in adolescent services to patient-level outcomes, such as access to HIV prevention, SRH services, testing yield, and viral suppression to ensure we have evidence-based guidance on what constitutes AFS.
- 2) Advancing and evaluating differentiated service delivery models for adolescents.
- 3) Further expanding peer network models for adolescents, for both support and as a mechanism to reach additional adolescents for testing.
- 4) Ensuring the engagement and active voice of adolescents in designing HIV and SRH programs.
- 5) Designing a program package that provides a wider-scale adolescent SRH response beyond just messaging and awareness.
- 6) Conducting additional evaluations to better understand the factors that contribute to lower viral suppression among adolescents in school, and piloting approaches to address these.
- 7) Designing a program package for adolescents who test HIV-negative and provide support to help them remain HIV-negative.

Examples of specific recommendations include:

- Where possible, implement small-scale DOTS programs within adolescent HIV programming.
- Further roll out peer-led HTS models for adolescents.
- Design school outreach to raise awareness and make referrals from schools to facilities, rather than to start clubs or give information to students only.
- HTS support can be refined in provider-initiated testing and counseling, with screening to increase yield. HTS for young index clients is challenging, and more work needs to be done to determine the best way to identify those who are not likely to show up at facilities even with referrals.
- Additional qualitative data should be gathered, through focus group discussion and other means, to lead to better understanding of adolescents' needs and thus to more targeted interventions.
- PSS and teen support groups need ways to move beyond the set curriculum, which may run over the course of a year and then continue monthly or quarterly for stable patients. In Kenya, the PSS group content was adapted on the spot by peer leaders, from adult topics. In Lusaka, Tisamala's model, while successful in school-settings and adopted at the national level, has not been evaluated for impact when adapted or used at a clinic setting. Across all countries, all ALHIV need information on HIV and ideas for improving support groups/PSS groups/teen clubs. There is a potential need for a website with an African focus to fill this gap.
- Patient literacy tools are not available or may be too simple. For example, Kenya released literacy tools in early 2017 with very basic cartoon information. Engaging peer leaders to translate technical topics for adolescents and lifetime treatment is necessary. Peer ambassadors will help clinicians to remove the jargon and reduce time spent explaining medical terminology. There are also very few materials for treatment supporters (parents or partners of ALHIV).
- New models for SRH provision to ALHIV in the public sector need to be tested. For example, a Uganda project recently showed that ALHIV are willing to use subsidized franchised services.
- Adolescents need to be actively involved at every point of service delivery.
- Projects need to closely collaborate with the MOH and other implementing partners on clinical components, particularly around viral load testing and results receipt.
- Projects should generally increase level of interaction with the MOH, as a way of reinforcing partnership and working toward the process of ensuring program sustainability. Specific interactions may include Adolescent Health Technical Working Group Meetings and national events, such as National Test and Treat Days and National Health Days.

Elizabeth Glaser Pediatric AIDS Foundation – Kenya

Ariel House | Westlands Avenue | Off David Osieli Road

P.O. Box 13612 – 00800 | Nairobi, Kenya

+254 20 44 54 081/2/3

WWW.PEDAIDS.ORG

 Facebook.com/EGPAF

 Twitter.com/EGPAF

Elizabeth Glaser Pediatric AIDS Foundation – Zambia

Plot 2374, Piziya Office Park Thabo Mbeki Road

P.O. Box 39111 Lusaka, Zambia

+ 260 211 256 481

WWW.PEDAIDS.ORG

 Facebook.com/EGPAF

 Twitter.com/EGPAF
