STAR-EC Technical Brief

WORKING TOWARD THE ELIMINATION OF MOTHER TO CHILD TRANSMISSION OF HIV

in East Central Uganda

Background

The prevention of mother-to-child transmission (PMTCT) of HIV is integral to the achievement of an AIDS-free generation. Without intervention, it is estimated that 25-40 percent of infants born to HIV-positive mothers will become infected; however, this risk can be reduced to less than five percent with current interventions. Comprehensive PMTCT programming includes four prongs: (1) prevention of HIV infection among women of childbearing age; (2) prevention of unintended pregnancy among women living with HIV; (3) provision of ART for life to pregnant women who test positive for HIV regardless of CD4 count (Option B+); and (4) provision of treatment, care, and support to women living with HIV and their families.[1] Widespread and reliable access to these services, particularly among high-risk and vulnerable populations, is essential to eliminating mother-to-child transmission (eMTCT).

Studies have estimated that in Uganda, the transmission of HIV from mothers to their babies during pregnancy, delivery, or breastfeeding, accounted for 18 percent of all new HIV infections.[2] A number of factors contributed to this figure, including high HIV prevalence among women of reproductive age, high fertility rates, low antenatal care (ANC) attendance. Access to PMTCT services, such as HIV testing and counseling (HTC), early infant diagnosis (EID), and antiretroviral therapy (ART), was also low. In addition to these factors, Uganda's East Central Region, comprised of nine districts with a total population of 3.3 million people, also faced a number of challenges in terms of PMTCT. The region has highly mobile groups of people who migrate for labor, including a large population of fishermen, and there are high levels of transactional sexual activity along the region's northern transport corridor. These factors present unique challenges in the effort to enroll and retain all HIV-positive mothers and babies in PMTCT services in the region.

An HIV-positive mother visits a health facility in Namatumba District to receive ARV drugs.

[1]PEPFAR (2010). Prevention of Mother-to-Child Transmission of HIV: Expert Panel Report and Recommendations to the U.S. Congress and U.S. Global AIDS Coordinator. http://www.pepfar.gov/documents/organization/135465.pdf (accessed 16/7/2016).
[2]Uganda AIDS Indicator Survey, 2011. https://dhsprogram.com/pubs/pdf/AIS10/AIS10.pdf (accessed 16/7/2016).

In 2009, PMTCT services in Uganda's East Central Region were only offered at 35 out of 118 sites (30 percent). Approximately 45 percent of health center IIIs and 28 percent of health center IVs offered PMTCT, mirroring the national coverage rate. With a regional HIV prevalence of 6.5 percent[3], it was estimated that 28 percent of all pregnancies (2,475 babies) in the region would result in new infections each year without any PMTCT intervention.

Interventions

STAR-EC, in collaboration with the Ministry of Health (MOH), has supported the implementation and scale up of high-quality, sustainable, PMTCT interventions in Uganda's East Central Region since 2009. STAR-EC introduced and scaled up a range of PMTCT interventions at all levels of service delivery. Aligned with the four-pronged PMTCT strategy, the goal was to increase demand for and availability of HIV prevention, ANC, and PMTCT services.

Developing the HIV capacity of health workers

STAR-EC trained 2,128 health workers to deliver PMTCT services. In 2013, Uganda adopted Option B+ (enrollment of every pregnant woman who tests positive for HIV on ART for life, regardless of her CD4 count) as its national strategy to achieve eMTCT. STAR-EC implemented the roll out and rapid scale up of Option B+ by training trainers who were subsequently deployed to health facilities to retrain health workers on the revised policies and procedures. The trainings covered the provision of HTC, EID, family planning, and ART services under the new strategy. Health workers also received continuous, on-site mentorship to ensure that the quality of service provision and patient record keeping was maintained. STAR-EC provided all health workers with national Option B+ guidelines to supplement their training and aid them in service delivery.

STAR-EC also selected and trained 100 health workers in routine counselling and testing to offer provider-initiated testing and counseling (PITC) during antenatal care at 43 high-volume and understaffed ART/PMTCT sites in the region to ensure that more HIV-positive women were enrolled treatment.

The roll out of PITC at health facilities offering PMTCT resulted in a dramatic increase to the number of pregnant women accessing HTC during ANC. In project year 2 (October 2009 to September 2010), 65,983 pregnant women were tested for HIV and knew their status; by the end of project year 7 (October 2014 to September 2015) this number had risen to 145,334.

Scaling up facilities that offer PMTCT and ART

Through the training of health workers and logistics support, STAR-EC has ensured that all 118 facilities offer HTC services. The project provided trained health workers with reliable supplies of HIV rapid result test kits and renovated laboratory hubs for EID/CD4 sample management. The project also contributed to the reduction of congestion at high volume facilities by building patient waiting rooms. STAR-EC also worked with the MOH to scale up the number of ART-accredited sites in the region from 28 to 95.

Mentor Mothers provide care and support services to HIV-positive mothers and their babies to help them stay healthy and adherent to ART

[3]Uganda AIDS Indicator Survey, 2011. https://dhsprogram.com/pubs/pdf/AIS10/AIS10.pdf (accessed 16/7/2016).

Utilizing Mentor Mothers and Male Champions to provide psychosocial support

The Mentor Mother Model[4] involves HIV-positive mothers and pregnant women who have successfully undergone PMTCT to provide peer support to newly diagnosed HIV positive pregnant and lactating women. mothers2mothers, an international NGO that partnered with JSI in the implementation of STAR-EC, identifies and trains Mentor Mothers to provide peer mentorship, counsel women on treatment adherence, and provide psychosocial support. STAR-EC identified high-volume, high-density PMTCT sites to place Mentor Mothers in order to support overstretched health workers and to provide client referrals and linkages within facilities and communities. The additional coverage of the Mentor Mothers was designed to minimize patients lost to follow-up and boost retention of the mother-baby pair through PMTCT-EID services.

STAR-EC has encouraged men to support newly diagnosed women through the use of 'Male Champions.' STAR-EC identified and trained supportive male partners of HIV-positive mothers to educate others in their communities about the importance of treatment adherence and encouraged men to be supportive of their partners.

Developing an enabling policy environment

STAR-EC facilitated collaboration between the MOH and the nine district health offices (DHOs) to improve efficiency and efficacy of PMTCT-EID programming in the East Central Region. The project improved routine collaboration between districts by facilitating quarterly district health team meetings, where key district personnel shared implementation challenges and best practices and built consensus for key decision making.

Results

Since 2009, STAR-EC has built the capacity of districts, communities, and facilities to deliver comprehensive PMTCT and EID services in the region with the goal of virtual eMTCT.[5] Through STAR-EC intervention, 118 facilities (including 4 hospitals, 12 health center IVs, 69 health center IIIs, and 33 health center IIs) have been supported to offer PMTCT services. By mid-March 2016 (the second quarter of project year 8), a total of 771,910 pregnant women accessed HTC while receiving ANC services. Of those pregnant women, 21,002 were HIV-positive and over 92 percent of them accessed antiretrovirals (ARVs) for prophylaxis treatment, an increase of more than 30 percent over project year 2 (see Figure 2). A total of 14,302 HIV-exposed babies accessed EID services. Today, an estimated 3.4 percent of babies born in East Central Uganda are born with HIV,[6] compared to the national average of 9 percent.

The roll out of Option B+ has drastically improved the proportion of HIV-positive pregnant mothers accessing ART. STAR-EC data shows that more than 90 percent of HIV-positive pregnant and lactating mothers and their HIV-exposed babies who visited facilities between October 2012 and July 2016 received ART for PMTCT. 3,147 Health workers have been trained in PMTCT; 19,195 HIV positive pregnant women received ARVs to reduce the risk of mother to child transmission of HIV; 14,302 exposed babies accessed EID services; The number of ART accredited sites in the region has increased from 28 to 95.

Conclusion

While significantly improving PMTCT services in the East Central Region between 2009 and 2016, STAR-EC has encountered a number of challenges. Cultural pressure to have large families persists, resulting in low uptake of family planning services as well as ANC, which means that community-based solutions are needed to increase HTC among women of reproductive age, including pregnant and lactating mothers.

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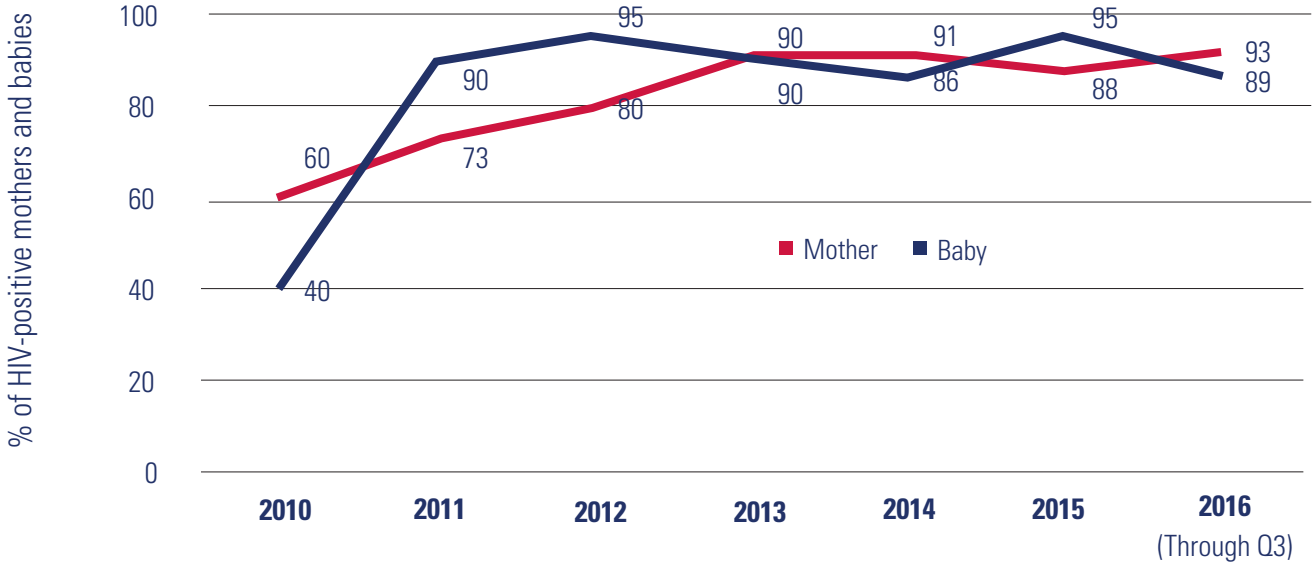
[4]The Mentor Mother Model includes training, employing, and empowering local mothers living with HIV, called Mentor Mothers, as frontline healthcare workers in understaffed health centres and within communities. For further information see: https://www.m2m.org/what-we-do-and-why/ (accessed 16/7/2016).
[5]This means an HIV transmission rate of less than 5%.
[6]STAR- EC Records

Insufficient human resources for health (HRH) in the region has led to congestion at facilities and over-extended service providers. Solutions to the HRH issues in the region remained outside the control of the project and its aims, but will need to be addressed to ensure sustained improvment to PMCTC services. Intermittent stock outs of ARVs and HIV test kits at facilities caused frequent interruptions to service provision. The percentage of facility-based deliveries remains low, due to cultural preferences to deliver at home with a traditional birth attendant, and because women are discouraged by over-crowded facilities. Implementation of psychosocial support group services are still hampered by low male involvement and complicated by a lack of dedicated counselors in the health staffing structure. Addressing these challenges will be critical in future PMTCT interventions in the region.

Community participation has been a critical component of successful PMTCT programming; future efforts should focus on engaging men at the community and household levels to have more active involvement in the care and treatment of pregnant and breastfeeding women. Rigorous logistics management of Option B+ at both the district and facility levels is essential to ensuring that more women and babies receive the needed prophylactic treatment. Improved management and mentorship regarding documentation, referrals, and linkages for mother-baby pairs is necessary to ensure greater accountability and decrease patients lost to follow up.

Figure 2: Trends of ARV uptake among PMTCT mother-baby pairs



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