



Care for HIV-infected mothers and their infants in a rural district of Tanzania

Context

Almost two million children (<15 years) are infected with HIV worldwide, with 150.000 new infections among children in 2015. More than 90% of these children live in sub-Saharan Africa and mother-to-child transmission (MTCT) accounts for over 90% of these cases.

In Tanzania, HIV care and treatment services are offered free of costs to all people living with HIV. The prevention of MTCT of HIV (PMTCT) program started in 2004. The current guidelines - published in September 2013 - recommend WHO Option B+: lifelong antiretroviral treatment (ART) for all pregnant and breastfeeding women, regardless of CD4 counts and clinical stage.

Several improvements have been noted in Tanzania since the implementation of Option B+: in 2014, 70% of pregnant women were counselled and tested for HIV. Among HIV-positive pregnant women, the PMTCT coverage was reported to be 90%. However, the MTCT rate was still at 9%, leading to 7.200 new child infections. Thus, Tanzania did not reach the UNAIDS' target of elimination of new pediatric HIV infections by 2015. Moreover, Early Infant Diagnosis (EID) of HIV is still unacceptably low with only 43% of HIV-exposed infants having an EID test done within the first 2 months of life.

In Ifakara, in the rural Kilombero district in southern Tanzania, HIV-infected pregnant women and mothers, their infants and their families (mainly male partners and older children) receive care through an integrated service delivery model since 2013. This model is known as the One Stop Clinic of Ifakara. Since 2014, the laboratory at the Ifakara Health Institute has the capacity to perform pro-viral DNA PCR and is responsible for the EID of HIV-exposed infants attended at the One Stop Clinic.

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| Reproductive and Child Health Care | <ul style="list-style-type: none"> - Antenatal care - Postpartum maternal/infant care - Growth monitoring and infant feeding support - Expanded Program of Immunization - Integrated Management of Childhood Illnesses - Cervical cancer screening |
| HIV testing for women, men, children and infants | |
| HIV Care and Treatment | <ul style="list-style-type: none"> - Antiretroviral treatment, co-trimoxazole prophylaxis - Routine clinical and laboratory monitoring - Management of opportunistic infections – tuberculosis, malaria, etc - Care to other family/household members |

Figure 1: The One Stop Clinic of Ifakara integrates health services for HIV-infected pregnant women, children, HIV-exposed infants and their families in a rural Tanzanian hospital



Government data reveals that in 2015, in antenatal clinics of the Kilombero district (including the One Stop Clinic):

- 6.500 pregnant women were attended
- 74% of them were tested for HIV
- 230 pregnant women were HIV-infected: 169 women were newly-diagnosed with HIV, 61 women were known to be HIV-infected before pregnancy

In contrast to this district data, the One Stop Clinic of Ifakara achievements are:

- 94% of pregnant women are counselled and tested for HIV (compared to the national data of 70% and district data of 74%)
- 90% of HIV-infected women receive ART (same coverage as the nationally reported)
- 72% of HIV-exposed infants had a EID test done within 2 months of life (compared to the 43% at a country level)
- MTCT rate of 2.2% (compared to the national 9%).

The One Stop Clinic model has not yet been expanded to the peripheral health centres in the Kilombero district. With the proposed project we intend to strengthen the care for HIV-infected mothers and their infants in the Kilombero district, by expanding the One Stop Clinic model to the periphery. The ultimate goal is the elimination of new paediatric HIV infections in the district.

Project description

General objective: Enhance and extend to the periphery a model of HIV care for pregnant and breastfeeding women and their infants, that has proven efficacious and feasible in the elimination of paediatric HIV in rural Africa.

Specific objectives:

1. To improve the HIV testing coverage of pregnant women in the health centres of the Kilombero district
2. To improve the retention in care of HIV-infected mothers in Ifakara and the peripheral health centres by:
 - a. Strengthening the counselling of pregnant and breastfeeding mothers
 - b. Making phone calls in case of a missed appointment;
 - c. Organizing awareness events.
3. To establish an EID circuit at a district level
4. To serve as a platform to generate reliable information concerning maternal and infant HIV care in rural Tanzania
5. To inform policy makers in Tanzania and support national policies



Figure 2: the aim of the project is to enhance the HIV service delivery to HIV-infected pregnant women and mothers and their families to reach the goal of the elimination of paediatric HIV

Target groups:

- HIV-infected pregnant women and breastfeeding mothers from the rural Kilombero district.
- Infants born from these women
- Male partners of these women
- Health workers responsible for PMTCT and working at the Kilombero district health centres

Intended results:

- ✓ Through the project's visits to the peripheral health centres and the optimization of the patients' flow and supply of HIV tests, we expect to reach over 6.000 pregnant women and increase the HIV testing rate above 90% in the whole district.
- ✓ Through the awareness events and nurse-led phone calls to women not attending their scheduled visits, we expect to reduce loss to follow-up rate below 20%.
- ✓ Through the project we expect to offer reliable, timely and district-based EID for these 200-230 HIV-exposed infants.

Partnership

The partnership comprises one institution in Tanzania and one in Switzerland.

The **Ifakara Health Institute (IHI)** is one of Africa's most eminent health research organizations. With a history of more than 50 years, IHI is an independent, non-profit Tanzanian organization with a rich and diverse research portfolio that covers important health challenges, including HIV/AIDS, TB, maternal & neonatal health and health systems. The output of the activities has resulted into new knowledge and public health policies being developed.

The **Swiss Tropical and Public Health Institute (Swiss TPH)** was created in 1943 and has become a renowned institution in the field of International Health Development. Swiss TPH contributes to the improvement of the health of populations internationally, nationally and locally through excellence in research, services and teaching and training. It also acts as a learning organization with a



knowledge sharing culture and defined processes of internal and external knowledge flows. Swiss TPH has achieved significant improvements of human health and well-being through a better understanding of disease and health systems and acting on this knowledge

In 1956, Swiss TPH founded the Ifakara Field Laboratory, which later became the Ifakara Health Institute. Research, teaching and training were gradually implemented and the teaching and training part of the activities was handed over to the Tanzanian Government in 1978. Since then, Swiss TPH remained one of the most important research partners of Ifakara Health Institute

Timeframe

May 2017 to April 2018

Contact

Anna Gamell, MD, Paediatrician
Swiss Tropical and Public Health Institute
Socintrasse 57, 4051 Basel, Switzerland
anna.gamell@unibas.ch