

# Exploring the feasibility of engaging Traditional Birth Attendants in a prevention of Mother to Child HIV Transmission program in Lilongwe, Malawi

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## Abstract

### Objective

To investigate the willingness of Traditional Birth Attendants (TBAs) to provide single dose antiretroviral prophylaxis to infants born to mothers with HIV and the feasibility of providing the TBAs with antiretroviral medication.

### Design

2 focus groups with a total of 17 registered TBAs.

### Setting:

Lilongwe, Malawi

### Methods

TBAs were recruited by local health workers and participated in focus groups assessing their attitudes towards participation in a PMTCT program.

### Results

TBAs were willing to participate in this prevention of mother-to-child HIV transmission (PMTCT) program and helped identify barriers to their participation.

### Conclusions

Given appropriate support and training, TBAs' participation in PMTCT programs could be an additional way to deliver medication to mothers and neonates who might otherwise miss crucial doses of medication.

## Introduction

The burden of HIV is seen most acutely in Sub-Saharan Africa where 90% of HIV infected children reside. In Malawi, the prevalence among people between ages 14 and 59 is 11%<sup>1</sup>. Amongst pregnant women prevalence of up to 17% is seen in urban areas<sup>2</sup>. Given the number of infants potentially exposed at childbirth, PMTCT is both significant and preventable. Without treatment, as many as 14-45% of infants can become infected with HIV during labor, delivery and breastfeeding<sup>3</sup>. In Malawi, almost 50% of pregnant women deliver outside the hospital with a TBA<sup>4</sup> despite HIV positive women being strongly advised to present to the hospital for delivery. Ensuring that HIV-positive women and their newborn infants receive single dose antiretroviral prophylaxis by TBAs is imperative to the overall success of prevention of mother-to-child HIV transmission (PMTCT) programs<sup>5</sup>. The Malawi PMTCT 2002 guidelines, in place at

the time of this study, were based on single-dose nevirapine prophylaxis, with the mother taking a dose at the onset of labor and the infant receiving a dose within 72 hours of delivery. A woman determined to be HIV positive is given her dose of nevirapine at the first antenatal visit. The infant's dose is dispensed at the hospital following delivery. Following this research study, Malawi has adopted Option B+ of the WHO recommendations that provide all HIV positive women with 3 antiretroviral drugs for life. While this is the ideal treatment for women, uptake will not be 100% and women will continue to deliver outside the hospital with TBAs, making their involvement in PMTCT still relevant.

## Materials and Methods

We conducted two focus groups in June 2007 with 17 registered, practicing TBAs in Lilongwe, Malawi. Active TBAs were contacted by local health workers and invited to participate in the focus groups. By creating a story about a hypothetical HIV positive woman presenting to the TBA in labor, the groups discussed TBA practices, willingness and barriers to, and support needed for, participation in a PMTCT program. The focus groups were conducted in Chichewa, the local language and led by a trained Malawian researcher. The focus groups were audio recorded, translated into English and transcribed for analysis. The two focus group sessions were then compared and prevailing themes identified using ATLAS.ti software for analysis.

## Results

The average time in TBA practice was 13 years. The majority learned their birthing skills from their mother. Nearly half of the TBAs had no formal education and only one TBA considered herself literate in written Chichewa.

TBAs identified structural barriers to delivering single dose antiretroviral prophylaxis including lack of training in administration of the medication and lack of adequate governmental support for their practice. The women highlighted their perceived lack of support by describing the acute need for supplies. Specifically the TBAs noted the need for soap, gloves, masks, aprons, clean water, shoes and cloth for swaddling newborns. Those who complete the governmental training are given delivery kits however they note the supplies are not adequate for the number of deliveries performed. This lack of personal protective equipment places TBAs at risk when participating in deliveries of HIV positive women.

The focus group participants stated they know where to look for the HIV status of the laboring woman in the woman's health passport and if positive they look for the antiretroviral prophylaxis in her bag. They voiced frustration at not having the medication to provide if the HIV positive woman arrived in labor without it.

Perceived barriers also focused on interactions with the laboring women, specifically women's fear of side effects of the medication for themselves and their newborn. Another important barrier was disclosure of HIV status by the woman to the TBA. Many women feared being forced to deliver

in the hospital, the current policy for HIV-positive women in labor, and would potentially hide their status as a way to deliver with the TBA. TBAs felt they could utilize their close relationship with laboring women to improve uptake of the single dose antiretroviral prophylaxis; a pregnant woman would be likely to trust the advice of her TBA to use the medication.

The TBAs did not feel that documentation of their work would be difficult as they are already in the practice of using pictorial records for charting. TBAs requested institutional support in the form of official sanction from the Malawian Ministry of Health, PMTCT training and better equipped birthing kits as well as a clearer identification symbol of HIV status on the health card.

## Discussion

TBAs in Malawi expressed universal willingness to participate in a PMTCT program with administration of single dose antiretroviral prophylaxis. Although therapy has changed from sd NVP to lifetime ARV therapy, TBA involvement in the PMTCT process may improve maternal and infant

outcomes through promotion of ART medication in the critical peri-partum period. With official support, provision of supplies, adequate training and a clear method to identify HIV infected women, the involvement of TBAs in a PMTCT program is feasible.

## References

1. UNAIDS/WHO. Geneva, Switzerland: UNAIDS/WHO; 2009. Epidemiological fact sheet on HIV and AIDS in Malawi. Core data on epidemiology and response.
2. UNAIDS/WHO. Geneva, Switzerland: UNAIDS/WHO; 2010. Malawi HIV and AIDS Monitoring and Evaluation Report: 2008-2009.
3. Berger P. The XIV International AIDS Conference: a call for action. *now. CMAJ.* September 3, 2002;167(5):483-484.
4. UNICEF. New York, New York: UNICEF; 2010. Malawi Statistics.
5. Ciaranello A. et al. WHO 2010 Guidelines for Prevention of Mother-to-Child HIV Transmission in Zimbabwe: Modeling Clinical Outcomes in Infants and Mothers; 2011. *PLoS One.* 2011; 6(6): e20224.