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## Background

Mother-to-child transmission is the main route of HIV infection in children in Malawi. In 2003, 520,000 women of child-bearing age were estimated to be HIV positive and about 35% of these mothers are likely to transmit HIV to their newborns.

Prevention of Mother-to-Child HIV transmission (PMTCT) has been implemented at Thyolo District Hospital (TDH) since 2002. PMTCT is currently in a scaling-up process. By the end of April 2005 a total of 6,282 mothers were tested of whom 1,345 (21.4%) were HIV positive.

Despite the success of voluntary counseling and HIV-testing, HIV positive Malawian mothers are unlikely to enroll and complete the PMTCT program. Research is needed to determine barriers to follow up to inform appropriate interventions to address this problem.

## Objectives

- Determine the strengths and challenges of the existing PMTCT program
- Determine the barriers and helping factors to participation and completion of the PMTCT program
- Provide recommendations to Médecins Sans Frontières (MSF) and the Malawian Ministry of Health (MOH).

## Methods

Thirty semi-structured interviews of health workers (HWs) at 7 health centers in Thyolo District and TDH itself. Eligible participants included: HWs willing and able to consent for an interview concerning the PMTCT program. All interviews were taped and transcribed verbatim. Emergent codes were developed and coded using Atlas Ti. Observational and secondary data were also collected to triangulate the data.

## Interviewees

Health Centers (7)		Thyolo District Hospital	
Nurses	7	Nurses	10
Medical Assts	5	Female	9
HSAs	7	Male	1
Female	8	Age	ave. 42 years (27-53)
Male	12		
Age	ave. 39.75 years (27-55)	Time with program	ave. 1.82 years (4 months - 4 years)
Time with program	1.67 years (5 months - 3 years)		

Thyolo District PMTCT Sites Visited



## Health Centers



## Thyolo District Hospital



## Descriptive Statistics

As of July 2006	
New Antenatal & subsequent visits CT	1321
HIV +	19%
Total PMTCT Mothers	317
Received Neviripine 1st Visit	218
Total Children Tested	458
HIV+	38 (8.3%)

## Results

### HWs identified strengths of the program contributing to healthier families

- Access to Care

Both TDH and the health centers are a "one-stop-shop" for ANC:

*"Antenatal, yeah, nowadays it's ok because in one room they're getting everything, all the services... Most of the services are being taken care of in antenatal care clinic."* TDH Nurse

- Successful Outcomes

*"300 babies born HIV negative."* TDH Nurse

- Care beyond mother and child

*"In a positive way, we have seen, upon testing, mothers bringing spouses to get tested and they are now healthy through ARVs."* -Health Center Medical Assistant

### HWs indicated weaknesses which made the program difficult to implement

#### At TDH

- Staff and supply shortages
- Lack of awareness among the entire hospital  
*"if everybody's conversant, I think it can be better."* TDH Nurse
- Inadequate training – ARVs and Clinical staging
- Successful follow-up of PMTCT mothers

#### At the Health Centers

- Inadequate training and dissemination of new policies  
*"Yea those new things just, at the training we were told that whenever the women is HIV+ she should stop breastfeeding at six months and then the child should be tested at 18 months. Then all of a sudden we are told that is has been changed that the child should be tested while at 12 months and then if the child is positive she should be tested again after three months and then if she is still positive, she should be tested again after three months. A thing we were not told at the training, but it is being changed."* HAS

- Overworked staff

*"But most of the time we do work here from 7 up to 4:00 without even stopping to go for lunch."* Health Surveillance Assistants (HSA)

- Staff and supply shortages

- Lack of feedback from referred patients

### HWs identified many barriers to participation and completion of the PMTCT program

- Male involvement and fear of divorce

*"I think it's because most of Malawian women are not able to make an option on their own they don't have rights on their own. They depend on their husbands to make a decision for them. And the main obstruction for this is that male involvement is a great challenge because most of the men do not come for the counseling and testing. Some of men even divorce their wives because they have gone to counseling and testing."* TDH Nurse

- Stigma around HIV

*"Well um, first these women when they came for antenatal on the first visit and the first testing, they accept their results, but then to come back they'll think that maybe if they come they'll be separated from the group and then they will be like the other women will know that this one is positive. So it's like the place where PMTCT is being done is what is disappointing the women to come back for follow-up."* HSA

- Stigma around HIV and abrupt breastfeeding weaning

*"So some mothers do come here to say, if I don't breastfeed my child the community will know I'm HIV+..."* TDH Nurse

- Long waiting at clinics

*"They shouldn't stay long hours before attending to, because sometimes if she stays long she can't think of coming again."* TDH Nurse

- Cost and distance, robberies during rainy season

### HWs did identify existing and potential helping factors to increase mothers' participation

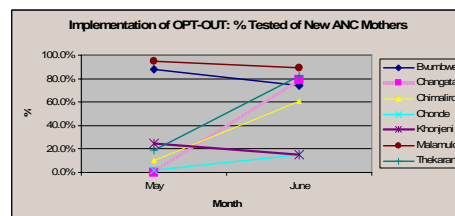
- Plumby nut food supplements and cloth

- Mothers on ART

- Home-based care

- Continued Information Education Communication efforts

## From VCT to Opt-Out



This shows the increase of testing of new ANC mothers. Despite confounding factors, like supply shortages, this trend of testing more mothers exists at TDH and all of the health centers. Most of the nurses supported the program, but there were mixed opinions from the HSAs complicating an important policy change to increase testing or ANC mothers.

*"We don't not inform them that this thing is being introduced, they just realized it when they come to the hospital. It's another challenging part because some people feel like they're being forced....That's why we have been meeting some of the dropouts, they say, 'I just realized I was being tested, but I didn't know why they were testing me.'"* TDH Nurse

## Conclusions

- More awareness of program – Male Involvement

- More training for Health workers

- Further research on mother's attitudes, particularly towards the Opt-Out program, hospital delivery, and abrupt weaning

## Acknowledgements

This student project was made possible through a UNC Office of Global Health scholarship. Additionally, the author would like to thank the Malawian Ministry of Health, Médecins Sans Frontières (MSF) Malawi, College of Medicine, Blantyre, Suzanne Maman, Steve Meshnick, Victor Mwapasa, and all the PMTCT Nurses and other health workers!