Accelerated HIV testing for PMTCT in maternity and labour wards is vital to capture mothers at a critical point in the programme at district level in Malawi.

**Introduction**

**Thyolo District**

- Mainly rural population: >570,000
- Prevalence HIV at ANC: approx. 22%
- No. living with HIV/AIDS: 50,000+
- No. with advanced HIV/AIDS: 8-11,000
- No. of estimated deliveries per year: 20-25,000
- No. Orphans – 40,000

- Mother to Child transmission (MCT) accounts for almost 1 million newly infected children in Sub-Saharan Africa annually.
- Missed opportunities for HIV testing in the prenatal maternity and labour wards were previously documented at 63% in our hospital in 2002-3 (1).
  
  (March 2002 - September 2003)

- Many HIV+ mothers give birth in health facilities without having had a previous HIV test, thereby missing an opportunity for prevention of transmission of infection to her infant and also care for her own health.

- In 2005 an audit of maternal deaths in Thyolo also found that infection related deaths accounted for 59% of all maternal mortality in 2005.

- While only a small number of mothers who died were tested, HIV was positive in all those who were tested.

- The objective of our study was to examine the impact of accelerated HIV testing in the maternity and delivery wards in Thyolo District Hospital. A prevention of mother to child transmission programme (PMTCT) had been implemented since beginning of 2002. Previously most of the testing was done at the antenatal clinic (ANC). (prevalence of 20%)

**Methods**

- A programme revision was conducted in 2005. Following this a number of changes were made.
- From June 2005 – January 2006 the PMTCT programme targeted women who attended for any inpatient care, including high-risk pregnancies, malaria, early labour or pregnancies for caesarean section.
- All admissions were offered Opt-out testing and counselling. Women who tested HIV positive were offered nevirapine (NVP) prophylaxis intrapartum. Their babies received a single dose of NVP within 72 hours after delivery (2 mg/kg).
- We adopted a One Stop Approach to our antenatal and maternity services (this meant that all prevention and care services were integrated in the same clinic). CD4 test and clinical staging were also introduced in August, 2005.
- The One Stop Approach was further accelerated in January 2006.
- A retrospective review of birth registers from June 2005 until January 2006 was done.

**Results**

- During the study period 1941 women delivered of whom 212 were previously identified as HIV positive (prevalence of 11%). (Fig. 1, 2)
- An additional 30 (12.4%) tested HIV positive in the maternity / labour ward.
- With an overall annual hospital based HIV prevalence of 20% a total of 388 HIV deliveries were expected and 146 (37%) were missed compared with 63% in 2003. In the final month of study a 24 hour testing service was implemented which resulted in an additional 73 women tested of whom 17 (24%) were HIV positive.

- From February till May 2006, 918 hospital deliveries were reported. With an overall prevalence rate of 22% (revised since Jan 2006) a total of 202 HIV + deliveries were expected. A reported 163 (81%) HIV deliveries took place in the hospital. Reduction from 63% to 19% missed opportunities for HIV testing. (Fig. 3, 4, 5)

**Conclusions**

- This additional PMTCT testing was well accepted by both staff and patients in the hospital. Round the clock, 24 x 7 days HIV testing is vital to maintain a high PMTCT coverage for women delivering in district health facilities.
- Acceleration in HIV testing in maternity and labour ward 24 x 7, could benefit patients by knowing the HIV status in advance and will make early intervention possible, with hopefully a reduction of maternal deaths. This needs further research.

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