Preliminary Outcomes of the PMTCT Option B+ programme in Thyolo District, Malawi

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In 2011: The Malawi Government adopted PMTCT Option B+ as a national policy

- Radical simplification of PMTCT programme
- Health benefit of earlier treatment and avoiding the risks of interrupting ART
- Protection from MTCT in future pregnancies (Total Fertility rate = 5.0*)
- Protection for negative partners in sero-discordant couples
- Reduction in HIV related maternal morbidity and mortality

*Malawi MDG Endline Survey 2014
Study Objectives

• To document the experience of implementing Option B+ in Thyolo District and important lessons learned;

• To describe the maternal outcomes of B+, specifically long-term adherence to taking ART and the incidence of subsequent pregnancies;

• To describe the infant outcomes of PMTCT B+, specifically access to HIV testing/diagnosis and incidence of HIV infection
Thyolo District is located in the Southwest of Malawi
• District population: 643,836

In 2010 (MDHS 2010):
• HIV prevalence 12-14% (15-49 y)

In June 2015:
• 41,494 patients on ART
• 96.1% ANC coverage
• 85% of ART coverage for HIV+ pregnant and breastfeeding mothers

*NSO, 2015
Methods

• **Study design:** Programme evaluation carried out over the course of routine health service provision

• **Study sites:** 6 Health Centres and 1 District Hospital

• **Study population:** 1,874 HIV+ pregnant or breastfeeding women eligible for PMTCT B+ & their infants

• **Data collection:**
  – Prospective cohort study
  – Mothers recruited from April 2012 to June 2014, and followed up for 2 years up to Dec 2015.

• **Ethical considerations:** Approved by Malawi National Health Sciences Research Committee & MSF Ethical Review Board
Results: Mother Outcomes

- 1874 Women were enrolled in the study
  - 1559 (83.2%) were pregnant at enrollment
  - 315 (16.8%) were breastfeeding
- Median age at enrolment: 27 y. (range: 12 – 45 y.)
- 6.3% of the women were reported to have taken ARVs previously.
- Of the 1,874 women in the cohort, 10 (0.5%) had a subsequent pregnancy, and 31 (1.7%) gave birth to twins.
- Of women who had a viral load test (94.4% were virologically suppressed at the time of their first viral load test. But only 10.5% got a VL test.
- 94.1% Had one or more ART refill
## Pregnancy outcomes

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
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<tbody>
<tr>
<td>Live birth</td>
<td>1,116</td>
<td>98.7%</td>
</tr>
<tr>
<td>Miscarriage/abortion</td>
<td>11</td>
<td>1%</td>
</tr>
<tr>
<td>Still birth</td>
<td>3</td>
<td>0.2%</td>
</tr>
<tr>
<td>Early neonatal death</td>
<td>1</td>
<td>0.1%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,131</strong></td>
<td><strong>100%</strong></td>
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Time on ART prior to delivery among women who were pregnant at the time of ART initiation.

32% starting ART less than 12 weeks before delivery.
Woman baseline

Women's baseline CD4 count (cells/microlitre)

- <=200: 23.9%
- 201-350: 32.4%
- 351-500: 25.1%
- >500: 18.6%

Women's WHO clinical stage at enrolment

- Stage 1: 89.3%
- Stage 2: 9.2%
- Stage 3: 1.4%
- Stage 4: 0.2%
Retention in care among women enrolling in the PMTCT B+ programme
Results

Infant Outcomes

- 1133 infants were enrolled
- 90.6% had 6 weeks of Nevirapine.
- DNA-PCR:
  - 69.2% of infants tested by 13 w.
  - Median time to the 1st test: 7.6 w.
  - 1002 total PCR tests performed before January 2015 (37 months period)
9 infants have become infected with HIV to date

- 2 were started on ART after a positive PCR result
- 1 was started on ART after a positive rapid test result
- 2 were presumably started on ART on clinical grounds because they didn’t have a PCR result or a rapid test result.
- The other 4 babies who became infected with HIV have no record of having started ART.
Infant PCR uptake among infants whose mothers enrolled during pregnancy

Proportion tested

Age (weeks)
0.6% of 964 infants tested had a positive PCR
Rapid test outcomes

• Results:
  – negative in 98.1%,
  – positive in 0.7%
  – indeterminate in 1.2%.

• Age:
  32.2% had a rapid test between the age of 12 and 15 months.
Retention-in-care among infants whose mothers enrolled during pregnancy
Conclusion and Recommendations

Programmatic interventions are needed:

• to improve retention-in-care among mothers
  - Work on attitude of the HCW,
  - Promote disclosure to partner
  - Distance to the facility (outreach clinic, CAG,...)
  - Dedicated counseling
  - Improve on documentation (Look for electronic data system)
  - Appointment system + systematic defaulter tracing

• to improve compliance with the national policy of testing HIV-exposed infants at 6 weeks

• to improve integration of care for mothers and infants.
  – Mother / infant pair clinic (link between Under 5 and postnatal care)
Acknowledgements

• Mothers and their babies.
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• MSF Research Team involved in the Study.
The End