Impact of implementation of Option B+ for ART scale up for TB patients

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Introduction

• Population 13.1 million (Housing & population census 2008)
• 10.6% HIV prevalence among 15-49 yrs age group (DHS 2010)
• Heterosexual contact remains the principal mode of HIV transmission
• Mother to child transmission responsible for approximately 25% of all new infections.
• Approx. 1 million people living with HIV with approx. 1 million orphans (NAC 2012).
• Late 2004: Free ARVs available in most public facilities in the country (T30); TB patients among priority groups.
Introduction


- Resource limited country; HIV response highly donor dependent.
- Routine HTC among TB initiated around 1999 in a project setting with link to CPT provision.
- Estimated 63,000 women in need of PMTCT services annually.
- 12,000 new paediatric HIV infections annually
- 77% HIV co-infection rate (2000 National HIV-Prevalence Survey among TB patients)
Rationale for Option B+

- Option B+ entails universal lifelong ART for all HIV infected pregnant and breastfeeding women.
- As a resource constrained country, Malawi had challenges with WHO options A & B:
  - Lack of CD4 capacity in most health facilities.
  - High fertility rate (5.6) with potential for frequent start/stop ART episodes.
  - High postpartum mortality in HIV infected women, even with CD4>350 compared to non-infected women (Hargrove et al - Zimbabwe study).
  - Up to 96% transmission reduction among discordant couples (HPTN study).
Implementation of new PMTCT/ART Guidelines

- Phased approach since July 2011 due to financial limitations
  - TDF/3TC/EFV for the following target groups
    - HIV infected pregnant and lactating women
    - Patients with severe lipodystrophy
    - New HIV/TB co-infected patients
    - The rest to remain on T30 or continue initiating on T30 until July 2013.
## Trends of TB patients in relation to treatment success and mortality rates

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of TB patients registered (all forms)</th>
<th>Treatment success rate</th>
<th>Mortality rate</th>
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<tbody>
<tr>
<td>2007</td>
<td>26302</td>
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<td>25684</td>
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<td>2009</td>
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<td>88</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>20210</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
% reduction in registered TB patients by year and gender
Figure 2: Patients newly initiated on ART and total ART clinic registrations per quarter

Total ART clinic registrations include patients who transferred between sites. This results in double counting of patients at the national level. For ‘patients newly initiated on ART’ every patient is only counted once.
% of ART registrations with current and previous TB History by Quarter

Q1 2010: 9%
Q2 2010: 9%
Q3 2010: 9%
Q4 2010: 9%
Q1 2011: 8%
Q2 2011: 7%
Q3 2011: 7%
Q4 2011: 6%
Q1 2012: 5%
Q2 2012: 5%
Q3 2012: 5%
Q4 2012: 5%
Figure 6: Group cohort survival analysis: Proportion of patients retained alive on ART 12, 24, 36, 48, 60, 72 and 84 months after ART initiation.
Achievements

- Improved ART uptake among pregnant and breastfeeding women between July 2011 and December 2012:
  - 56,744 women started on Option B+;
    - 36,349 (64%) in pregnancy and
    - 20,395 (36%) whilst breastfeeding.
  - This represents an eight-fold increase from the quarterly average of 1,200 pregnant women starting ART in the period before the policy change (July 2011) to an average 9,500 pregnant and breastfeeding women starting each quarter thereafter.
While there has been an increase in ART uptake among pregnant and breastfeeding women, there is no evidence to demonstrate the impact of Option B+ for ART scale up for TB patients.

To what extent can the observed reduction in mortality among TB and ART patients be attributed to Option B+?