Universal access of ART for TB patients: what needs to be done?

Haileyesus Getahun, MD, PhD, MPH.
Stop TB Department
WHO recommendation on ART for TB patients

- ART should be started in all TB patients irrespective of their CD4 count.
- ART as soon as possible and within 8 weeks following the initiation of anti-TB treatment.
- ART immediately within 2 weeks for those with profound immunosuppression (e.g. CD4 < 50 cells)
- Efavirenz should be used as the preferred NNRTI in patients starting ART while on anti-TB treatment.
Upcoming WHO Consolidated ART Guidelines (June 2013)

• Clinical, operational and programmatic

• Earlier initiation of ART (CD4 ≤ 500)

• Immediate ART: children<5 yrs, TB patients and pregnant women

• Simplified, fewer, and less toxic 1st line regimens

• Recommend task shifting, decentralization, and integration including with TB services

Earlier initiation of ART will play critical role to prevent TB
Inequity of ART provision to TB patients

![Bar chart showing the percentage of All PLHIV and PLHIV with TB from 2009 to 2011.](chart.png)

- **2009**: All PLHIV 42%, PLHIV with TB 39%
- **2010**: All PLHIV 51%, PLHIV with TB 46%
- **2011**: All PLHIV 58%, PLHIV with TB 48%
Recent autopsy studies among PLHIV (CROI 2013)

Proportion of cadavers with TB

- Adults died at home in South Africa (Martinson et al): 34%
- PLHIV died after median 10 months of ART (Some et al): 52%
- PLHIV died within 3 months of ART (Mutevedzi et al): 21%
ART coverage among new HIV positive TB patients in 2011 of all countries attending this meeting.
Earlier and effective adoption of national guidelines is crucial.
All HIV patients with TB are eligible to begin ART regardless of CD4 cell count.

TB treatment should be started first, followed by ART as soon as possible and within the first 8 weeks of beginning ATT

- Patients with CD4 count ≤ 100 cells/μl: start ART as soon as the patient is tolerating ATT
- Patients with CD4 count > 100 cells/μl: start ART within 8 weeks and at least by the end of the initial phase of ATT

For patients with CD4 counts ≤ 50 cell/μL, ART should be started as soon as possible. However, caution is advised in severely immunosuppressed patients with suspected neurological involvement or deranged LFTs. Great care must be taken to monitor these patients for hepatitis and worsening of TB due to IRIS (seek advice from TB/HIV specialist if necessary).
ART guidelines Ethiopia, 2012

- ART is recommended for all HIV infected TB patients with CD4 count of ≤ 350 cells/mm³.

- CD4 cells count must be determined for all HIV infected TB patients prior to the initiation of ART.
Kenya: one stop service for TB and HIV

Integrated TB and HIV services at same place and time
Results: One stop service model in Rwanda
Percent shows out of all identified HIV positive TB patients nationally

TB nurse
- Provides HIV testing
- Draws blood for CD4
- Provides ART and CPT

Decentralisation of services and task shifting to nurses
Task shifting: nurse monitored ART is not inferior to doctor monitored ART (Sanne I, et al, 2010)
Nurses and health officers can initiate ART with better results (Assefa Y et al, 2011)

Outcome of patients initiated ART by nurses and physicians after 24 months of follow up, Ethiopia.

<table>
<thead>
<tr>
<th></th>
<th>Health officers and nurses (Health center)</th>
<th>Physicians (Hospitals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality (%)</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Lost to follow up (%)</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Retention rate (%)</td>
<td>76</td>
<td>67</td>
</tr>
<tr>
<td>Median CD4 count (IQR)</td>
<td>322 (242, 414)</td>
<td>301 (217,411)</td>
</tr>
</tbody>
</table>
Use the decentralized TB services to provide ART.
Integrated TB and HIV services requirements

- More physical space
- Renovation and restructuring
- Qualified staff
- Robust M and E
- Infection control
- Quality baseline ART evaluation
Summary

• 100% coverage of ART for TB patients is essential to eliminate TB deaths.

• Rapid adoption and roll out of national policies is crucial.

• Models of services integration based on local context, resources and epidemiology should be used.

• Decentralised TB services need to be used to scale up HIV treatment and prevention.

• Provide ART to TB patients while undergoing baseline ART evaluation and treatment literacy.