Global Progress Report: Addressing TB/HIV and Implementation of Collaborative Activities

Professor Diane Havlir
Chair, HIV/TB Working Group
University of California
San Francisco, USA

Presented on behalf of Haileyesus Getahun and the HIV/TB Working Group of the WHO/STOP TB Partnership
Overview

• TB is lead killer in HIV patients AND HIV is major challenge for TB control efforts
• In 2004, WHO STOP TB and HIV/AIDS published Policy on Collaborative TB/HIV Activities --to break down barriers and address this problem
• What progress has been made and how can we do better?
<table>
<thead>
<tr>
<th></th>
<th>Estimated number of cases</th>
<th>Estimated number of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All forms of TB 2010</strong></td>
<td>8.8 million (range: 8.5-9.2 million)</td>
<td>1.1 million* (range: 0.9-1.2 million)</td>
</tr>
<tr>
<td><strong>All forms of TB 2004</strong></td>
<td>9 million (range: 8.5 –9.5 million)</td>
<td>1.3 million* (range: 1.1-1.5 million)</td>
</tr>
<tr>
<td><strong>HIV-associated TB 2010</strong></td>
<td>1.1 million (13%) (range: 1.0-1.2 million)</td>
<td>350,000 (range: 320,000-380,000)</td>
</tr>
<tr>
<td><strong>HIV-associated TB 2004</strong></td>
<td>1.1 million (12%) (range: 0.99–1.2 million)</td>
<td>490,000 (range: 460,000-520,000)</td>
</tr>
</tbody>
</table>

HIV TB cases  1) still a large proportion of TB cases, 2) associated with disproportionate number of deaths  3) should be preventable

*excluding deaths among PLHIV
Key Components to HIV/TB Response from WHO Policy

**REDUCE MORTALITY**
- HIV Testing
- Antiretroviral Therapy
- Intensified TB Case Finding

**PREVENT TB**
- Isoniazid Preventive Therapy
- ART for Prevention

Country Policy, Infection Control, Diagnostics
HIV testing: Policy

• Routine HIV testing should be offered to all patients with presumptive and diagnosed TB

• Partners of know HIV-positive TB patients should be offered voluntary HIV testing and counselling with mutual disclosure

Global Plan 2015 targets: 100% of notified TB patients
Progress of HIV testing for notified TB patients

- 2007: 16%
- 2008: 22%
- 2009: 28%
- 2010: 34%
## HIV Testing—Select Regions

<table>
<thead>
<tr>
<th>REGION</th>
<th>2004 PERCENT OF TB CASES HIV TESTED</th>
<th>2010 PERCENT of TB CASES HIV TESTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL</td>
<td>3%</td>
<td>34%</td>
</tr>
<tr>
<td>WPRO</td>
<td>0.6%</td>
<td>19%</td>
</tr>
<tr>
<td>SEARO</td>
<td>0.01%</td>
<td>23%</td>
</tr>
<tr>
<td>AFRO</td>
<td>4%</td>
<td>59%</td>
</tr>
</tbody>
</table>

Global Plan 2015 targets: 100% of notified TB patients
HIV testing scale up

- No technical excuse not to do: Rapid, simple, inexpensive test for HIV
- Countries need to determine best way to motivate HIV testing for all TB patients
- Different approaches for different countries

STRATEGIES

- Provider-initiated HIV testing in TB clinics
- Patient requested HIV testing in TB clinics
- Mass HIV testing and TB screening campaign
ART* for TB patients: Policy

- Start ART in all PLHIV with active TB, irrespective of CD4 count
- Start TB treatment first, followed by ART as soon as possible within first 8 weeks
- If CD4<50, start as a matter of emergency within first 2 weeks of TB treatment

*ART= HIV Antiretroviral Therapy

Global Plan 2015 targets: 100% of TB patients living with HIV
Progress of ART for TB patients

**Global**

- 2007: 50,000
- 2008: 100,000
- 2009: 150,000
- 2010: 200,000

**AFRO**

- 2007: 50,000
- 2008: 100,000
- 2009: 150,000
- 2010: 200,000

**WPRO - SEARO**

- 2007: 5,000
- 2008: 10,000
- 2009: 15,000
- 2010: 20,000

- WPRO: 2007, Cambodia, PNG, Viet Nam
- SEARO: 2007, India
- WPRO: 2008, Cambodia, PNG, Viet Nam
- SEARO: 2008, India
- WPRO: 2009, Cambodia, PNG, Viet Nam
- SEARO: 2009, India
- WPRO: 2010, Cambodia, PNG, Viet Nam
- SEARO: 2010, India
## ART for TB Patients — Select Regions

<table>
<thead>
<tr>
<th>REGION</th>
<th>2004 PERCENT Of TB on ART</th>
<th>2010 PERCENT of TB on ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL</td>
<td>22%</td>
<td>46%</td>
</tr>
<tr>
<td>WPRO</td>
<td>3%</td>
<td>41%</td>
</tr>
<tr>
<td>SEARO</td>
<td>0</td>
<td>57%</td>
</tr>
<tr>
<td>AFRO</td>
<td>13%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Global Plan 2015 targets: 100% of notified TB patients
ART for TB Patients Scale Up

- ART is most essential intervention to reduce mortality from TB in HIV patients
- More complex than HIV testing
- Requires ready access to ART for TB patients
- Best approach in HIV low prevalence countries not established

STRATEGIES

- Integration of TB and HIV services in “one-stop” clinic (South Africa, Lesotho, Uganda)
- Decentralization of ART in TB clinics (Zambia, Kenya)
TB screening among PLHIV: Policy

- Adults and adolescents living with HIV should be screened for TB with a clinical algorithm that relies on 4 symptoms: current cough, fever, weight loss and night sweats.

- In children, the algorithm includes poor weight gain, fever, current cough or contact history with a TB case.

Global Plan 2015 targets: 100% of PLHIV enrolled in HIV and PMTCT care.
Progress of TB screening among PLHIV

**Global**

- 2007: 1,000,000
- 2008: 2,000,000
- 2009: 3,000,000
- 2010: 4,000,000

**WPRO-SEARO**

- 2007: 50,000
- 2008: 100,000
- 2009: 150,000
- 2010: 200,000

**AFRO**

- 2007: 500,000
- 2008: 1,000,000
- 2009: 1,500,000
- 2010: 2,000,000
TB Screening for HIV Patients — Select Regions

<table>
<thead>
<tr>
<th>REGION</th>
<th>2004 Number of PLHIV screened for TB</th>
<th>2010 Number of PLHIV screened for TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL</td>
<td>97,700</td>
<td>2,316,000</td>
</tr>
<tr>
<td>WPRO</td>
<td>7,100</td>
<td>69,000</td>
</tr>
<tr>
<td>SEARO</td>
<td>0</td>
<td>235,000</td>
</tr>
<tr>
<td>AFRO</td>
<td>61,000</td>
<td>1,985,000</td>
</tr>
</tbody>
</table>

Global Plan 2015 targets: 100% of notified TB patients
TB screening for PLHIV Scale Up

- Responsibility of HIV care programs to include TB screening in HIV care package
- Greatest challenges are a) limitations of diagnostics b) access to new diagnostics
- Nevertheless, HIV programs must screen and treat for TB when suspected

STRATEGIES

- HIV care programs with integrated TB screening incorporated into standard patient flow
- HIV programs with on site diagnostic facilities and mechanisms to rapidly implement TB results
IPT among PLHIV: Policy

- Adults and adolescents living with HIV who do not report any of current cough, fever, weight loss or night sweats are unlikely to have active TB and should be offered at least 6 months of IPT.

- Children living with HIV (<12 months) who do not have any of poor weight gain, fever, current cough or a contact with TB case are unlikely to have active TB and should be offered at least 6 months of IPT.

Global Plan 2015 targets: 100% of eligible PLHIV enrolled in care.
Progress of IPT among PLHIV

**Global**

- Values: 0, 50,000, 100,000, 150,000, 200,000

**WPRO-SEARO**

- Countries: WPRO, Cambodia, China, PNG, Viet Nam, SEARO, India
- Values: 0, 500, 1,000, 1,500, 2,000, 2,500

**AFRO**

- Countries: AFRO, Ethiopia, Kenya
## IPT for PLHIV - Select Regions

<table>
<thead>
<tr>
<th>REGION</th>
<th>2004 Number of PLHIV with IPT</th>
<th>2010 Number of PLHIV With IPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBAL</td>
<td>12,000</td>
<td>178,200</td>
</tr>
<tr>
<td>WPRO</td>
<td>0</td>
<td>2,000</td>
</tr>
<tr>
<td>SEARO</td>
<td>0</td>
<td>580</td>
</tr>
<tr>
<td>AFRO</td>
<td>12,000</td>
<td>156,100</td>
</tr>
</tbody>
</table>

Global Plan 2015 targets: 100% of notified TB patients
IPT for PLHIV Scale Up

• Some countries still have policy unsupportive for IPT–these need to be changed
• Responsibility of HIV care programs to implement IPT
• Ruling out TB is a challenge but data support simple “streamlined assessment” to rule out active TB and start IPT
IPT streamlined assessment

- Use of simple clinical algorithm based on 4 symptoms: current cough, fever, weight loss or night sweats
- TST not a mandatory requirement:

**EARLY RESULTS**

South Africa: Linked to mass HIV testing campaign, from 25,583 in 2009 to 124,049 in 2010
Cambodia: from 66 in 2009 to 491 in 2010
Ethiopia: from 2,403 in 2009 to 6,636 in 2010
ART for TB prevention

- HPTN 052: significant reduction in AIDS PTB at CD4>350 compared to CD4<250

- Observational & RCT data: reduction in individual risk by 54% to 92%

- Meta-analysis*: reduction of TB risk by 65% at any CD4 count

* Suthar AB et al, submitted for publication
2010 and the Way Forward to 100% Targets

REDUCE MORTALITY

- HIV Testing *
- Antiretroviral Therapy *

PREVENT TB

- Intensified TB Case Finding *
- Isoniazid Preventive Therapy*
- ART for Prevention

Country Policy, Infection Control, Diagnostics

*Global Plan 2015 targets: 100%
Challenges

• Low buy-in from HIV programmes
• TB programs overwhelmed with current volume
• Country policies that go against targets e.g. IPT
• Marginalized populations: TB and HIV dual epidemic among IDUs and in prisons
• Convergence with MDR-TB epidemic
Conclusions: We need to accelerate progress to meet goals

- Significant implementation since HIV/TB Policy
- Different regions with different success rates and different challenges
- **Insufficient progress in all regions** to meet 2015 targets
- Tools exist to meet goals – we need smart strategies
- Political will, tailored approaches, community will be key to success

China TB prevalence halved and mortality reduced by 78% 1990-2010
Extra Slides
The 12 points policy package: What's new?

A. Establish the mechanisms for integrated TB & HIV services
1. Set up or strengthen a TB/HIV coordinating body effective at all levels
2. Conduct HIV and TB surveillance among TB and HIV patients respectively
3. Carry out joint TB/HIV planning
4. Conduct monitoring and evaluation

B. Decrease the burden of TB in PLHIV and early initiation of ART (the Three Is for HIV/TB)
5. Intensify TB case finding and ensure quality TB treatment
6. Introduce TB prevention with IPT and ART
7. Infection control for TB in health care and congregate settings ensured

C. Decrease the burden of HIV in patients with presumptive and diagnosed TB
8. Provide HIV testing & counselling to patients with presumptive and diagnosed TB
9. Introduce HIV preventive methods patients with presumptive and diagnosed TB
10. Provide CPT for TB patients living with HIV
11. Ensure HIV prevention, treatment & care for TB patients living with HIV
12. Provide Antiretroviral therapy to TB patients living with HIV
Estimated HIV prevalence in new TB cases, 2010
### HIV testing and treatment, 2010

<table>
<thead>
<tr>
<th>Region</th>
<th>Tested for HIV, thousands (%)</th>
<th>% of tested TB patients HIV-positive</th>
<th>% of identified HIV positive TB patients on CPT</th>
<th>% of identified HIV positive TB patients on ART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>2100 (34%)</td>
<td>23</td>
<td>77</td>
<td>46</td>
</tr>
<tr>
<td>WPRO</td>
<td>250 (19%)</td>
<td>4.8</td>
<td>55</td>
<td>41</td>
</tr>
<tr>
<td>Cambodia</td>
<td>32 (77%)</td>
<td>6.6</td>
<td>64</td>
<td>45</td>
</tr>
<tr>
<td>China</td>
<td>150 (16%)</td>
<td>3.1</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>PNG</td>
<td>1.1 (7.6%)</td>
<td>12</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>42 (43%)</td>
<td>8.3</td>
<td>62</td>
<td>43</td>
</tr>
<tr>
<td>SEARO</td>
<td>540 (23%)</td>
<td>9.5</td>
<td>87</td>
<td>57</td>
</tr>
<tr>
<td>India</td>
<td>480 (32%)</td>
<td>8.6</td>
<td>90</td>
<td>57</td>
</tr>
<tr>
<td>AFRO</td>
<td>880 (59%)</td>
<td>44</td>
<td>76</td>
<td>42</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>67 (43%)</td>
<td>15</td>
<td>69</td>
<td>39</td>
</tr>
<tr>
<td>Kenya</td>
<td>97 (91%)</td>
<td>41</td>
<td>100</td>
<td>48</td>
</tr>
</tbody>
</table>
Infection Control

- Implementation of proper IC measures crucial throughout health facilities in high TB burden settings

- 46 out of 63 TB/HIV priority countries reporting having an IC plan in health facilities providing services to PLHIV in 2010

Global Plan 2015 targets: all TB/HIV priority countries with a plan for IC in health facilities providing services to PLHIV