Global implementation of TB screening and Isoniazid preventive therapy among people living with HIV

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WHO
### WHO recommended Collaborative TB/HIV activities

<table>
<thead>
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<th>A. Establish the mechanism for collaboration</th>
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<td>A.1. TB/HIV coordinating bodies</td>
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<td>A.2. HIV surveillance among TB patient</td>
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<td>A.3. TB/HIV planning</td>
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<td>A.4. TB/HIV monitoring and evaluation</td>
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Jointly by NAP and NTP

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<th>B. To decrease the burden of TB in PLWHA</th>
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<td>B.1. Intensified TB case finding</td>
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<td>B.2. Isoniazid preventive therapy</td>
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<td>B.3. TB infection control in health care and other settings</td>
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AIDS programme

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<th>C. To decrease the burden of HIV in TB patients</th>
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<td>C.1. HIV testing and counselling</td>
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<td>C.2. HIV preventive methods</td>
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<td>C.3. Cotrimoxazole preventive therapy</td>
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<td>C.4. HIV/AIDS care and support</td>
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<td>C.5. Antiretroviral therapy to TB patients</td>
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TB programme
Source of data: WHO global TB monitoring system

TB/HIV data collected from NAP and NTP  2002-06
Global progress in implementation of key interventions (2002-2006)

Rapid progress in reducing HIV burden in TB patients and in the sub-Saharan Africa than others.
Countries with policy to provide IPT to PLHIV, 2006 (N=82)

Djibouti, India, Indonesia, Lesotho, Rwanda and Zambia exclude IPT as a national policy.
Eligibility criteria for an organization/institution to offer Isoniazid preventive therapy.

The following are the minimum requirements for an organization/institution to offer IPT:

**Human resource:**
- Medical Officer
- Laboratory assistant
- Trained counselor
- Pharmacy technician
- Adherence supporters

**Infrastructure:**
- Functional Laboratory
- X-ray or access to x-ray services
- Counseling room/space
- Consultation room

**Equipment and logistics:**
- Facilities for TB microscopy
- Facilities for skin testing (mantoux)
- Cold chain system
- Facilities for HIV testing
- Sustainable supply of anti-TB drugs including Isoniazid
- Sustainable supply of HIV test kits

**Other key issues:**
- If an organization has a TB default rate of greater than 5% it will not be eligible to provide IPT

"Considering that provision of IPT is labor intensive yet there is limited human resource and limited organizational capacity to offer it, feasibility of this therapy in Uganda is still a national challenge" 2006
Countries reported provision of IPT to PLHIV, 2006 (N=24)

Key
- No reported activity
- Countries reporting IPT

• Only 0.08% of PLHIV put on IPT globally
• Botswana report 70% of the global PLHIV on IPT

* Brazil provide IPT but did not report for 2006
Countries with policy on intensified TB case finding among PLHIV, 2006 (N=109)
0.96% of PLHIV are screened for TB globally

South Africa and Russia report 68% of the screened PLHIV

* Brazil did not report for 2006
Percentage of PLHIV screened for TB in countries with 80% of the global burden, 2006.
Proportion of PLHIV screened and diagnosed with TB in selected countries, 2006

- South Africa: 29% PLHIV screened for TB, 29% PLHIV with TB after screening
- Mozambique: 8% PLHIV screened for TB, 0% PLHIV with TB after screening
- India: 20% PLHIV screened for TB, 20% PLHIV with TB after screening
- Ethiopia: 31% PLHIV screened for TB, 31% PLHIV with TB after screening
- Rwanda: 72% PLHIV screened for TB, 72% PLHIV with TB after screening
FIGURE 1.17
Treatment outcomes for HIV-positive and HIV-negative TB patients, 2005 cohort. The numbers under the bars are the numbers of patients included in the cohort.

- HIV+ (6113) Smear-positive (data from 43 countries)
- HIV- (148571) Smear-negative and extrapulmonary (data from 42 countries)
- HIV+ (8100) Smear-negative and extrapulmonary (data from 42 countries)
- HIV- (130583) Re-treatment (data from 22 countries)

Legend:
- Not evaluated
- Transferred
- Defaulted
- Failed
- Died
- Completed
- Cured
Challenges: IPT

- Fear of "drug resistance" by TB programme managers and control over Isoniazid
- Existing policies are restrictive and labor intensive
  - IPT dropped as a national policy: Kenya
  - Tuberculin skin test difficulties
  - Burundi reprogrammed Global Fund funding for IPT
Challenges: TB screening

- Lack of rapid, simple and accurate TB diagnostic tool

- No internationally recommended standardised TB screening tool

- Low uptake of TB interventions by HIV stakeholders including policy makers and service providers
Conclusions

• The global implementation of interventions to reduce TB burden among PLHIV is unacceptably very low.

• There is disconnect between policy and implementation in many countries.

• There are urgent basic and operational research needs.