Eliminating HIV-associated TB deaths: What does it mean?

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WHO/HQ
Outline

• Magnitude of death among PLHIV?
• Why do PLHIV die of TB?
• What needs to be done to prevent TB deaths?
• Galvanising political momentum through the Ministerial TB Conference
• Conclusion
TB in autopsy studies among PLHIV

TB is a leading cause of mortality in HIV-positive adults and children admitted to hospital worldwide.
## Unsuccessful TB treatment outcomes by HIV status

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-neg (3 829 482)</td>
<td>3 (5) 11</td>
<td>3 (5) 11</td>
<td>3 (5) 11</td>
</tr>
<tr>
<td>HIV-pos (397 460)</td>
<td>8 (6) 11</td>
<td>8 (6) 11</td>
<td>8 (6) 11</td>
</tr>
<tr>
<td>HIV-neg (4 222 703)</td>
<td>3 (4) 11</td>
<td>3 (4) 11</td>
<td>3 (4) 11</td>
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<tr>
<td>HIV-pos (421 504)</td>
<td>6 (6) 11</td>
<td>6 (6) 11</td>
<td>6 (6) 11</td>
</tr>
<tr>
<td>HIV-neg (4 338 766)</td>
<td>3 (4) 11</td>
<td>3 (4) 11</td>
<td>3 (4) 11</td>
</tr>
<tr>
<td>HIV-pos (424 249)</td>
<td>11 (6) 6</td>
<td>11 (6) 6</td>
<td>11 (6) 6</td>
</tr>
</tbody>
</table>

- **Failed**
- **Not evaluated**
- **Lost to follow-up**
- **Died**

*Global TB Database, July 2017*
So why should PLHIV die of TB?
Less than half of PLHIV receive TB care (HIV testing gap in general population)

![Bar chart showing Estimated TB among PLHIV and Detected TB cases among PLHIV from 2005 to 2015.](Global TB Database, 2017)
TB case finding practice among PLHIV is diverse across countries.
Delay in TB diagnosis is common and could last several months

<table>
<thead>
<tr>
<th>Study/Setting</th>
<th>Median delay in TB diagnosis (days)</th>
<th>HIV rate in study participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makwakwa, Malawi, 2014</td>
<td>80 (44–129)</td>
<td>70</td>
</tr>
<tr>
<td>Bogale, Ethiopia, 2017</td>
<td>41.6 (14-95)</td>
<td>23</td>
</tr>
<tr>
<td>Yimer, Ethiopia, 2014</td>
<td>60 (30-121)</td>
<td>25</td>
</tr>
<tr>
<td>Said, Tanzania, 2017</td>
<td>21 (7-315)</td>
<td>28</td>
</tr>
<tr>
<td>Cruz-Ferro, Spain, 2014</td>
<td>56</td>
<td>5</td>
</tr>
</tbody>
</table>
Significant TB diagnosis and prevention gap among PLHIV newly enrolled to care (WHO, 2015)
Disparity in the number of facilities providing TB and HIV services in most countries

* Source: 2015-2017 Global Fund Concept Note
** Source: National TB Strategic Plan, 2015-2020
Convergence of HIV with drug resistant TB

Treatment outcomes for HIV and MDR-TB co-infected adults and children: systematic review and meta-analysis

P. Isaakidis,*† E. C. Casas,†† M. Das,* X. Tseretopoulou,†† E. E. Ntzani,†† N. Ford§

38% mortality among adult PLHIV vs 11% among HIV-neg.

11.5% mortality among children living with HIV vs 6% among HIV-neg.

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Increased TB risk and mortality among people who use drugs with or without HIV

**Figure 2** Cumulative survival probability in a cohort of 792 HIV-infected TB patients by category of HIV transmission, Barcelona, 1996–2008. TB = tuberculosis; IDU = injecting drug use; HIV = human immunodeficiency virus. Risk group log rank < 0.001.

**Fig. 5** Studies showing association between alcohol and/or drug abuse and TB death

Catala, Spain, 2011  
Kawatsu, Kekkaku, 2014
We have the interventions to impact TB deaths among PLHIV
ART and TB prevention are critical interventions. INH/B6/CTX FDC 

1% ↑ in ART coverage
1% ↓ in TB mortality

97% ↓ TB incidence with IPT + ART
37% ↓ in TB mortality after 5y of IPT

2. Yan et al Plos One 2016
3. Badje et al, CROI 2017
4. Sterling NEJM, 2011

INH/B6/CTX FDC

12 week INH-Rifapentine has good adherence and less toxicity
6.5 million lives of PLHIV were saved in 10 years through the scaling up of TB/HIV interventions
We need to galvanise political momentum to intensify scaling up of life saving interventions
Aims to accelerate implementation of the WHO End TB Strategy - with immediate action addressing gaps in access to care and the MDR-TB crisis through national and global commitments, deliverables and accountability.

The Ministerial Conference will inform the UN General Assembly High-Level Meeting on TB in 2018.

It will be attended by Ministers of Health and other line Ministries (e.g. Justice, Social)
Top outcome areas and thematic tracks – TB/HIV is one key area

EIGHT THEMATIC TRACKS
Based on the SDG agenda and the UNGA high level health themes

1. UNIVERSAL COVERAGE OF TB CARE AND PREVENTION
2. SUSTAINABLE FINANCING FOR TB, UHC AND SOCIAL PROTECTION
3. RESPECT FOR EQUITY, ETHICS AND HUMAN RIGHTS
4. SCIENTIFIC RESEARCH AND INNOVATION
5. MONITORING AND EVALUATION OF PROGRESS
6. ACTION ON AMR, HEALTH SECURITY AND MDR-TB
7. STEPPED-UP TB/HIV RESPONSE
8. SYNERGIES ACROSS THE RESPONSES TO TB AND NONCOMMUNICABLE DISEASES

* This outcome area also encompasses actions on: Equity, ethics and human rights; AMR, health security and MDR-TB; TB/HIV response; and synergies across the responses to TB and noncommunicable diseases.
FIRST WHO GLOBAL MINISTERIAL CONFERENCE
ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA: A MULTISECTORAL RESPONSE

16 - 17 NOVEMBER 2017,
MOSCOW, RUSSIAN FEDERATION

What are we aiming for?

EFFECTIVE TB prevention through TB preventive treatment and universal ART coverage

EARLY diagnosis of TB and MDR-TB among PLHIV using rapid and reliable diagnostic pathway

EARLY treatment of HIV and TB and MDR-TB including empiric TB treatment

Political Action to Eliminate TB Deaths among PLHIV

Decentralized, coordinated and Integrated TB and HIV care

New Tools

The Ministerial Conference offers a unique opportunity to reinvigorate political commitment and action to address HIV-associated TB
Conclusion

• By the end of this session (90 minutes) nearly 70 People living with HIV will have died of TB.

• TB is preventable and treatable

• There is no #EndAIDS without addressing #TB

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