Reaching 90-90-90 Goals Together: Improving TB/HIV case finding through integration

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Outline

• Why TB matters in the HIV response
• TB within the Fast-track 90-90-90 targets
• Challenges in HIV testing
• Recommendations
• Conclusion
High mortality from HIV-associated TB even among PLHIV on ART

A quarter of all deaths among PLHIV due to TB in 2013
Global TB treatment outcomes by HIV status, 2012 cohort

PLHIV at 3-fold risk of dying during TB treatment
Globally 50% HIV-positive TB was not notified in 2013

Estimated number of HIV-positive people who developed TB compared with notified HIV-positive TB patients, 2004-2013

Global Tuberculosis Report 2014, WHO
TB patients with known HIV status in 138 low and middle-income countries by region, 2009 and 2014

51% of TB patients knew their HIV status in 2014

How does TB fit into 90-90-90?

- 90% HIV-related TB diagnosed
- 100% TB patients living with HIV on ART
- 90% eligible PLHIV on preventive therapy (IPT)
Improving case-finding - together

Entry via HIV testing and ART services

Entry via TB services for TB investigations

Screen for cough, fever, night sweats & weight loss + TB diagnosis

Test for HIV

TB patients with known HIV status = #Test4HIV + #Screen4TB
Key challenges in expanding HIV testing

- HIV testing for TB patients in concentrated settings
  - Unavailability of HIV services
  - Resource requirement

- Low coverage among presumed TB cases in high HIV settings

**Patient perspective**

'It was too much for me. Just in a matter of two weeks everything was going wrong in my life. First I came here thinking it was a simple cough and was told it was TB. The next thing was doing an HIV test. I just couldn’t handle it all at once’ (38-year-old female, HIV status unknown).

*Journal of social aspects of HIV/AIDS, Vol. 7, No 4, Dec 2010, Cameroon*

**Figure 1 Patients’ reasons for non-uptake of HIV testing (n = 216 citations)**

- Indecisiveness: 37.0%
- Fear: 19.0%
- No/low risk perception: 13.4%
- Still dealing with TB: 12.5%
- HIV test not advised: 12.0%
- Other: 6.0%

*Kigozi et al. BMC Health Services Research 2011, 1:110, South Africa*
Recommendations on HIV-testing for patients with diagnosed or presumed TB

- Routine HIV testing should be offered to all patients with presumptive and diagnosed TB.
- Partners of known HIV-positive TB patients should be offered HTS with mutual disclosure.
- TB-control programmes should mainstream provision of HTS in their operations and routine services.

HIV testing of presumptive TB is feasible and effective

<table>
<thead>
<tr>
<th>Patient group</th>
<th>HIV seropositive n/N (%)</th>
<th>Univariate analysis OR (95% CI)</th>
<th>P value</th>
<th>Multivariate analysis AOR* (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients</td>
<td>238/565 (42)</td>
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<td></td>
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<tr>
<td>By TB diagnosis status</td>
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<tr>
<td>Received TB diagnosis</td>
<td>147/378 (39)</td>
<td>Referent</td>
<td>0.02</td>
<td>1.5 (1.0–2.1)</td>
<td>0.06</td>
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<tr>
<td>Received non-TB diagnosis</td>
<td>87/176 (49)</td>
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</tbody>
</table>

HIV = human immunodeficiency virus; TB = tuberculosis; AOR = adjusted odds ratio; CI = confidence interval; NS = non-significant.

TB screening during pre-test counselling

Clients attending HIV testing services (facility or community settings)

Pre-test information & counselling

HIV testing & TB symptom screening/investigation as per national guidelines

HIV-positive

HIV-negative

TB-positive

No TB

TB-positive

No TB

Prompt TB treatment & ART

Consider TB preventive therapy (IPT) and ART

Prompt referral for TB treatment

Post-test information & counselling if requested

New recommendation

HTS should integrate screening for TB symptoms into the pre-test information session before HIV testing, both at health facilities and in community-based testing.
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Best practice: Integrated services, where HIV testing, HIV prevention, treatment and care services, TB screening are provided at a single facility or site.
Integrated TB screening in PMTCT Services

Maternal TB is associated with a 2.5 increased risk of vertical transmission of HIV to exposed infants.  
A Gupta et al, JID, 2011

The package of HIV care for pregnant women should include systematic screening of TB symptoms and referral and treatment as necessary.
Other platforms for integrated TB screening and HTS

- Community triage
- Harm reduction services
- Prison health services
- Workplace initiatives

5Cs: CONSENT, CONFIDENTIALITY, COUNSELLING, CORRECT RESULTS AND CONNECTION APPLICABLE TO TB SCREENING

Lay providers who are trained and supervised can independently conduct safe and effective HIV testing services using rapid diagnostic tests.
Conclusion

• HIV testing in presumptive & diagnosed TB cases is effective at identifying PLHIV & saving lives in all settings

• Reaching the first 90%, will help to diagnose 90% of HIV-related TB.

• Co-location and integration facilitates scale-up and increases access in both generalized and concentrated epidemics.

• Lay providers – potential game-changers in increasing the detection of HIV-associated TB.
#Test4HIV #Screen4TB

TB in pregnant women with HIV linked to over twice the risk of transmission to unborn child. http://bit.ly/1K73pn2 #Test4HIV #Screen4TB

HIV testing in presumptive & diagnosed TB cases is effective at identifying PLHIV & saving lives http://bit.ly/1K73pn2 #Test4HIV

@WHO recommends HIV testing by lay providers using RDTs. This can enhance access to HTS for TB patients http://bit.ly/1K73pn2 #Test4HIV

@WHO recommends TB screening integrated into HTS for all populations receiving an HIV test http://bit.ly/1K73pn2 #Test4HIV #Screen4TB

*Test 4 triage* by lay providers can enhance access to HTS for TB patients & TB screening in PLHIV http://bit.ly/1K73pn2 #Test4HIV #Screen4TB