Challenges in Scaling-up TB/HIV collaborative activities in a diverse HIV epidemic - India

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Evolution of TB/HIV activities in India
Evolution of TB/HIV collaborative activities in India

• 2003: Pilot for HIV-TB cross-referral in 4 districts of Maharashtra started
• 2007– Pilot for Routine referral of TB patients for HIV testing and CPT
  – Joint National (policy) framework for TB/HIV developed

• 2008– National Framework revised
  – Intensified Package (IP) rolled out in 9 states
    • Routine Offer of HIV testing to TB patients
    • Decentralized Provision of CPT and
    • Revised Recording and reporting system

• 2009- National Framework revised
  – Intensified Package rolled out in 8 more states
  – Uniform activities at ART centres and ICTCs nationwide for intensified TB case finding developed
  – ICF activities at ICTC established across the country
• 2010
  – Intensified package launched in 11 states
  – ICF activities at ART centres implemented

• 2011: Consolidation of Joint TB/HIV activities
  – Enhanced coverage of HIV testing of TB patients
  – Strengthened linkage to ART centres
  – Policy decisions regarding eligibility of ART (CD4 count less than 350/cumm)
  – Operational research to test yield of HIV among presumptive TB cases (suspects)

• 2012: Nation wide coverage of intensified TB/HIV package -June 2012
  – State wide pilot implementation of HIV testing among TB suspects
Status of implementation of TB/HIV activities
# ICF at VCT centre - Tuberculosis detection

<table>
<thead>
<tr>
<th>Year</th>
<th>Total clients attending VCT</th>
<th>Total TB suspects identified</th>
<th>Total TB cases detected</th>
<th>TB cases notified under the NTP</th>
<th>Contribution by ICF to total TB notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>7,678,746*</td>
<td>484,617</td>
<td>51,412</td>
<td>1,521,438</td>
<td>3.4%</td>
</tr>
<tr>
<td>2011</td>
<td>9,774,522</td>
<td>580,689</td>
<td>55,572</td>
<td>1,515,872</td>
<td>3.7%</td>
</tr>
<tr>
<td>2012 (Upto April 2012)</td>
<td>3,255,630</td>
<td>196,039</td>
<td>16,861</td>
<td>364,338</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

* 22/29 states reported on ICF, while all states reported in 2011
## ICF at ART centres

<table>
<thead>
<tr>
<th>Year</th>
<th>Total ARTC footfalls (cumulative)</th>
<th>Total TB suspects identified</th>
<th>Total TB cases detected</th>
<th>Total initiated on ATT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,748,431</td>
<td>56,739</td>
<td>15,911</td>
<td>13,318</td>
</tr>
<tr>
<td>2011</td>
<td>3,822,281</td>
<td>111,521</td>
<td>28,435</td>
<td>23,773</td>
</tr>
<tr>
<td>2012</td>
<td>1,820,100</td>
<td>47,185</td>
<td>10,722</td>
<td>8,822</td>
</tr>
</tbody>
</table>

- **Proportion TB suspects**: Between 3% (About 5% in High prevalent states)
- **Proportion TB suspects found TB**: about 23% to 28%
- **Proportion linked to ATT under national programme**: 84%
Proportion of registered TB patients with known HIV Status, 3q 2011

< 50%  
50% - 79.9%  
>= 80%

Data not available

Number (%) of HIV-infected TB patients receiving CPT during TB treatment, 4q 2008 – 1q 2011
Number (%) of HIV-infected TB patients receiving ART during TB treatment, 4q 2008 – 1q 2011

- 4q08: 41%
- 1q09: 43%
- 2q09: 47%
- 3q09: 50%
- 4q09: 53%
- 1q10: 56%
- 2q10: 57%
- 3q10: 59%
- 4q10: 62%
- 1q11: 66%

Number of HIV+TB patients receiving ART

% of HIV+TB patients receiving ART

0 1000 2000 3000 4000 5000 6000 7000
0 10 20 30 40 50 60 70
4q08 1q09 2q09 3q09 4q09 1q10 2q10 3q10 4q10 1q11

Number of HIV+TB patients receiving ART

% of HIV+TB patients receiving ART
Challenges and Interventions
Challenges

1. Establishing co-ordination mechanism between two national programmes
   – National Tuberculosis control programme implemented since 1962
   – National AIDS Control Programme implemented since 1998 under a separate Department in ministry of health

2. Concentrated HIV epidemic

3. Capacity building of health staff
   – Staff of general health system
   – Staff provided by the two National programmes

4. Infrastructure Gap between NACP and NTP

5. Improving Quality of services
Challenge-1 – Establishing Mechanism for collaboration between two National Programmes
National Framework includes policy guidelines to
- Establish the mechanisms for coordination
- Interventions to decrease burden of TB among PLHA
- Interventions to decrease impact of HIV among TB patients
Letters issued by both National programmes for smooth implementation
## Co-ordination Mechanisms

<table>
<thead>
<tr>
<th>Level</th>
<th>Chair</th>
<th>Mechanism</th>
<th>Frequency of meeting</th>
<th>Mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>DDG TB / DDG BSD NACO</td>
<td>National technical working Group (NTWG)</td>
<td>Quarterly Meeting</td>
<td>Policy decisions, review</td>
</tr>
<tr>
<td></td>
<td>DG NACO/JS RNTCP</td>
<td>Annual Review of TB/HIV Collaborative activities at National and State level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Principal Secretary Health</td>
<td>State Coordination Committee (SCC)</td>
<td>Bi-annual</td>
<td>Policy decisions at state level</td>
</tr>
<tr>
<td></td>
<td>PD-SACS / STO</td>
<td>State technical working Group (SWG)</td>
<td>Quarterly</td>
<td>Review</td>
</tr>
<tr>
<td>District</td>
<td>District collector/DM</td>
<td>District Coordination Committee (DCC)</td>
<td>Quarterly</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td>DTO-DAPCU / HIV Nodal officer</td>
<td>HIV-TB coordination meeting</td>
<td>Monthly</td>
<td>Review</td>
</tr>
</tbody>
</table>
Challenge 2: choice of interventions in a concentrated HIV Epidemic
Concentrated HIV/AIDS Epidemic

Heterogeneous Spread of HIV in India
(District Categorisation based on HIV Prevalence)

<table>
<thead>
<tr>
<th>Category</th>
<th>NACP-III</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>156</td>
</tr>
<tr>
<td>B</td>
<td>39</td>
</tr>
<tr>
<td>C</td>
<td>296</td>
</tr>
<tr>
<td>D</td>
<td>118</td>
</tr>
<tr>
<td>New Districts</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>609</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>NACP-III Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt; 1% ANC prevalence in any of the sites in the last 3 years</td>
</tr>
<tr>
<td>B</td>
<td>&lt; 1% ANC prevalence in all the sites during last 3 years with &gt; 5% prevalence in any HRG site (STD/FSW/MSM/IDU)</td>
</tr>
<tr>
<td>C</td>
<td>&lt; 1% ANC prevalence in all sites during last 3 years with &lt; 5% in all STD clinic attendees or any HRG, with known hot spots</td>
</tr>
<tr>
<td>D</td>
<td>&lt; 1% ANC prevalence in all sites during last 3 years with &lt; 5% in all STD clinic attendees or any HRG OR no or poor HIV data with no known hot spots</td>
</tr>
</tbody>
</table>
Strategy adopted...

• Implementation of basic activities in high HIV prevalent settings
• Operational research
• Pilot implementation of interventions in high HIV prevalent settings
• Expansion of the intervention to low Prevalent settings in phased manner
• Programme interventions guided by joint OR conducted at national level

• Inputs from premier national institutes like TB research centre Chennai (NIRT)

• Intervention to minimize burden of HIV among TB cases
  – Intensified TB/HIV Package developed based on 2 pilot studies –
    1. HIV sero-prevalence study among TB cases
    2. Decentralized delivery of CPT for HIV TB through RNTCP and
    3. Feasibility of PITC for TB patients
HIV Seroprevalence in TB patients - 2006-07

- Guntur: 13.8
- Parbhani: 12
- Davangere: 9.3
- Tiruvanamalai: 9.3
- Raigarh: 11
- Villipuram: 12
- Vizianagaram: 13.8

15 districts having 11,020 new TB cases, >6000 specimens HIV tested
HIV positivity among New TB cases ranged between 1% to 13%
(National estimate - 4.85%)

Raizada et.al., PLoS ONE /August 2008 /Vol 3/8 | e2970
1. Feasibility of routine HIV testing among TB patients through a VCTC - Thomas et.all –

   - **Findings:** About 70% TB patients were willing to get tested and that it is feasible to routinely test TB patients for HIV


   - **Findings:** With implementation of PITC, HIV status can be successfully ascertained in more than 70% TB patients


   - **Findings:** This study provides evidence that routine, provider-initiated voluntary HIV testing of TB patients is acceptable, feasible and can be achieved with very high efficiency under programmatic conditions

- **Findings:** This study provides evidence that routine, provider-initiated voluntary HIV testing of TB patients is acceptable, feasible and can be achieved with very high efficiency under programmatic conditions


- **Finding:** Cotrimoxazole prophylaxis can be delivered to HIV-infected TB patients under programmatic conditions in India
Challenge 3: Capacity building of health staff at different levels
Standard TBHIV Training Modules

Training Manual on Intensified TB/HIV Package
for NACP & RNTCP Programme Managers at State and District level

Training Manual on Intensified TB/HIV Package
for Medical Officers

Training Manual on Intensified TB/HIV Package
for ART Centre Staff

TB/HIV Module for ART Centre Staff

Training Manual on Intensified TB/HIV Package
for Pharmacists

Training Manual on Intensified TB/HIV Package
for ICTC Counsellors

Prepared Jointly by NACP and RNTCP
## Joint HIV/TB Training

<table>
<thead>
<tr>
<th>Category of Staff</th>
<th>Level</th>
<th>Number of Days</th>
<th>Content</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training of Trainers</td>
<td>National</td>
<td>2</td>
<td>Programme Managers module</td>
<td>NACO/CTD</td>
</tr>
<tr>
<td>MO-ICTC/MOTC</td>
<td>State</td>
<td>2</td>
<td>Programme Managers module</td>
<td>SACS/STC</td>
</tr>
<tr>
<td>ICTC Counselors , District ICTC supervisors</td>
<td>State</td>
<td>2</td>
<td>Counselors module</td>
<td>SACS/STC</td>
</tr>
<tr>
<td>RNTCP STS/STLS RNTCP district , DP-TBHIV supervisor</td>
<td>State</td>
<td>2</td>
<td>Programme Managers module</td>
<td>SACS/STC</td>
</tr>
<tr>
<td>MO PHI</td>
<td>District</td>
<td>1</td>
<td>MO module</td>
<td>DTO/DNO</td>
</tr>
<tr>
<td>TBHV, Pharmacist &amp; Institutional DOT provider</td>
<td>District/ Sub-District</td>
<td>½</td>
<td>DOT provider module</td>
<td>DTO/DNO</td>
</tr>
<tr>
<td>ANM/MPW/CHV</td>
<td>Sub-District</td>
<td>1/2</td>
<td>DOT provider module</td>
<td>DTO/DNO</td>
</tr>
</tbody>
</table>

- **Conduct of training:** Joint responsibility
- In Non-A and B districts, TB programme manager takes lead
- Expenditure for training at all level bourned under NACP
Challenge 4: Infrastructure gap

- While HIV is concentrated epidemic in India, it is highest TB burden country in the world
- The NTP is implemented since 1962
- Revised NTP (RNTCP) is implemented since 1998
- Decentralized diagnosis and treatment (DOT) spread uniformly across the country

<table>
<thead>
<tr>
<th>Number of service delivery locations, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
</tr>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td>4,533 Stand alone VCT centres</td>
</tr>
<tr>
<td>Treatment</td>
</tr>
<tr>
<td>351 ART centres</td>
</tr>
<tr>
<td>739 Link ART centres</td>
</tr>
</tbody>
</table>
1. Enhancing access for HIV testing

- Facility Integrated ICTC being established: 5018 established using existing health infrastructure

- Efforts for greater involvement of private sector- 964 VCT centre established by March 2012

- Total number of VCT facilities existing as on date are **10515**

- NACP is working towards establishing HIV testing facilities at all TB laboratories (DMC) by
  - Establishing F-ICTC
  - Provision of Whole Blood HIV screening test (rapid anti-body test)

2. Enhancing access to ART

- Establishment of Link-ART Plus centres and Link ART centres
Challenge 5: Improving Quality of services

1. Early Detection of HIV/TB
   - The National Technical Working Group has agreed that PLHIV would be prioritized for rapid TB diagnostic (Expert MTB rif)
   - Similarly PLHIV prioritized for sputum and culture examinations to detect DR-TB

2. Prompt initiation of ART and ATT
   - All TB/HIV cases now eligible for ART
   - Strengthened monitoring to ensure that all HIV infected TB cases are promptly initiated on ART
   - Operational research to identify the gap in prompt ART initiation undertaken
Thank you