The Three I’s for HIV/TB
and
Rolling out IPT beyond Pilot -India

Dr. B. B. Rewari
WHO National Consultant
National Programme Officer (ART)
National AIDS Control Organisation
New Delhi, India
Content

• Background about the problem
• Status of implementation of 3 I’s in India
• Implementation of Intensified Case Finding (ICF) at HIV care settings
• Airborne Infection control (AIC)
• Isoniazid Preventive Therapy (IPT) – Progress till date
Background
Declining Trends of HIV Epidemic in India

Female: 38.7% of PLHA; Children: 4.4% of PLHA

Source: HIV Estimations, 2008-09
District-wise Scenario of HIV/AIDS

<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>

### Category NACP-III Definition

<table>
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<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>
HIV and TB scenario

- **HIV**: Concentrated
  - 0.31% adult prevalence
  - 2.4 million persons
  - Heterogeneous distribution
  - NACP (National AIDS Control Programme)-1992

- **TB**: Everywhere, highest burden
  - About 2.3 m incident TB cases/yr
  - 5% (110,000) HIV-infected with high mortality
  - RNTCP (Revised National TB Control Programme)
Implementation of 3 I’s
Status of implementation of the 3 I’s

• **Intensified case finding (ICF):** implemented at majority of HIV care settings across the country, nearly 12,000

• **Infection control** in HIV care settings
  – National Airborne Infection Control policy developed by NTP
  – Basic infection control practices implemented at all ART centres

• **Isoniazid Preventive Therapy (IPT)**
  – National TB/HIV technical working group accepted global evidence in favor of IPT as a strategy
  – Operational research to study feasibility and additional value over early ART initiation underway
Intensified case finding (ICF)

• ICF activity are implemented at Voluntary Counselling and testing centres (VCT centres called ICTC in India) since 2008

• ICF at ART centres launched in 2009 and rapidly expanded in 2010

• ICF further expanded to the Link-ART centres (a mechanism for decentralized CST) in 2012
How ICF works in India?

- Counselor at a VCT centre (or ART centre) actively looks for Tuberculosis symptoms in all clients.

- Clients (or HIV infected individual at ART centre) having symptom are referred to NTP diagnostic facility.
• All referrals are enlisted by NACP staff and the list is shared with NTP staff monthly

• The NTP staff provide information on
  – Outcome of the investigations
  – Status of TB treatment

• Monthly TB/HIV reports are generated jointly by NACP and NTP staff and reported in the MIS
ICF at VCT centres - Trend

- Total ICTC clients referred
- Proportion referred

- 2006: 4.20%
- 2007: 3.80%
- 2008: 5%
- 2009: 6%
- 2010: 6%
- 2011: 6%
- 2012 (Upto April 2012): 6%
<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 in Six HIV high prevalent states - India

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<tr>
<td>2010</td>
<td>5,086,718</td>
<td>369,918</td>
<td>34,932</td>
<td>409,233</td>
<td>9%</td>
</tr>
<tr>
<td>2011</td>
<td>5,6479,97</td>
<td>419,560</td>
<td>36,622</td>
<td>404,423</td>
<td>9%</td>
</tr>
<tr>
<td>2012</td>
<td>1,652,398</td>
<td>136,055</td>
<td>11,081</td>
<td>100,410</td>
<td>11%</td>
</tr>
</tbody>
</table>
About 12,000 TB suspects are identified every month and >2500 TB cases are detected through ICF at ART centres.
### 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%
(Air-borne) Infection Control (AIC/IC)
OPD and ART waiting area
Infection Control

- National AIC Guidelines (NAIC) developed and adopted by National TB Programme
- Pilot completed (AP, GU, WB)
- Recommended Infection control measures included in training module for HIV care staff
- Officers at NACP sensitized regarding need of IC
- Risk assessments being undertaken by NACO at all ART centers, to be followed with site-specific interventions
Infection Control activities implemented at ART centres

• Administrative measures
  – Infection control plan and SOPs
  – Staff education and training – Included in training module
  – Identification of staff for AIC activities
  – Counseling of TB patient regarding cough etiquettes
  – Triage: Fast-tracking of cough symptomatic through waiting area, consultation, investigation and drug collection
  – Display of IEC material for cough etiquettes, TB screening etc.

• Environmental measures
  – Promotion of Natural ventilation in waiting area
  – Appropriate sitting arrangement considering cross-ventilation

• Personal protection measures
  – Provision of surgical masks to symptomatic patients
  – Facilities for hand wash etc.
Recommended arrangement of patients and staff

• Optimal arrangement of patients and staff being implemented in all outpatient departments, ART centers, and ICTC
Messaging on Cough Etiquette at ART centres
Challenges in implementation of AIC

• ART centres established in space available within exiting hospital buildings
• State government and Hospital authorities not keen for structural modification considering cost implication
• Large patient burden in general and ART centres
• No provision for the Costly N-95 respirators/masks for staff

NACP is advocating for AIC measures in all newly constructed hospital buildings
Isoniazid Preventive Therapy (IPT)
1. IPT strategy is under consideration at NACP since early 2010

2. It was deliberated in meetings of the National technical working group for TB/HIV (NTWG)

3. The NTWG recommended conduct of operational research study at 5 ART centres to study the feasibility

4. A workshop for development of protocol for operational research on IPT at 5 ART centres was held in April 2010 at NACO

5. The protocol developed in this workshop was not executed due to change of guard in both NACP and RNTCP
   - All Key officers associated with the project were transferred
NARI consultation

• The issue got a Philip with National level consultation hosted by National AIDS Research Institute of India in January.
• Leading HIV researchers and experts participated in this consultation and deliberated on need of IPT use in the country perspective.
• International experts presented the evidence forming basis of WHO recommendations on IPT and other global experience in use of IPT.
• The overall recommendations for National Programme:
  – The evidence on efficacy of IPT to reduce TB incidence in PLHIV is clear
  – Trials from India have also demonstrated efficacy of IPT (Pre-ART era)
  – The fear of increased risk of INH resistance is unfounded
Concerns of National Programme managers

- Evidence from India on usefulness of IPT from Pre-ART era
- Several RCT demonstrated that ART reduces TB incidence by 50 - 70%
- India adopted early ART initiation strategy in late 2011 (CD4 less than 350/cumm)
- Lack of evidence from India regarding *add-on benefit* of IPT over early ART initiation
- Is IPT feasible to implement in India? 1.5 million in HIV care
• Concerns were deliberated in NTWG meeting in June 2011

• The NTWG recommended to request National Institute for research in Tuberculosis (NIRT) to conduct an IPT efficacy cum operational feasibility study and guide the National Programme

• The NIRT developed two separate protocols – Adult and Children and submitted for approval of NACO

• NACO approved the protocol in October 2011
Proposed IPT study

• Study in **15 ART centres** across 3 states in South India and 2 states in North

• **Study design :**
  – A prospective cohort study
  – Pre-post comparison – to study efficacy of IPT
  – Implementation in **routine programmatic settings** with no additional human resources to test feasibility of the strategy

• **Sample estimate:**
  – Assumption 50% reduction in TB breakdown due to IPT among patients followed up at ART centres
  – Minimum sample required to estimate TB incidence with 95% confidence and 1% precision is 6000
Inputs in the study include training of staff, introduction of limited records and reports and supervision & monitoring.

The funds required for above inputs are proposed through the Model DOTS Project arrangement of NIRT with WHO SEARO.

The drugs required (Isoniazid and Vitamin B6) to be mobilized by Central TB division.

NIRT obtained approvals of Scientific Advisory Committee and institutional ethics clearance in January-February 2012.

Preparations for the study underway.

Enrollment pending due to non-receipt of funds.
• NTWG meeting held on 19th July 2012
• Progress of study reviewed. Another study proposed by AIIMS on efficacy not approved and PI asked to be part of this feasibility study
• Informed that funding is now available from WHO
• Data presented on IPT study from Myanmar where CIPT is being implemented
• Hope to start study by next month
Thank you