Experience in scaling up childhood TB activities

Childhood TB Roadmap—updates and next steps

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NTLP—TANZANIA
OUTLINE

- Status of childhood TB in Tanzania
- Child TB linkages with National TB Strategic Plan
- Development Pediatric TB guide
- Challenges and opportunities
- Examples of successful activities/interventions
- Next steps – way forward
Status of childhood TB: Trends TB case notification <15 years; 2003 to 2010

- New smear positive
- New smear negative
- New extrapulmonary
<table>
<thead>
<tr>
<th>Form</th>
<th>Children (&lt; 15 yrs)</th>
<th>Adult ( &gt; 15 yrs)</th>
<th>Grand -total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>SM +ve</td>
<td>192</td>
<td>224</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>(1.7%)</td>
<td></td>
<td>(98.3%)</td>
</tr>
<tr>
<td>SM –ve</td>
<td>1,278</td>
<td>1088</td>
<td>2,366</td>
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<td></td>
<td>(11.4%)</td>
<td></td>
<td>(88.6%)</td>
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<tr>
<td>EPTB</td>
<td>1,204</td>
<td>982</td>
<td>2,186</td>
</tr>
<tr>
<td></td>
<td>(15.7%)</td>
<td></td>
<td>(84.3%)</td>
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<tr>
<td>Total new cases</td>
<td>2,674</td>
<td>2,274</td>
<td>4,968</td>
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<tr>
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<td>(8.4%)</td>
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<td>(91.6%)</td>
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</table>
Status of childhood TB: current policies in place

- The NTLP in its fourth strategic plan (2009 – 2015) among other objectives it intend to pursue high quality DOTS expansion and enhancement with special focus on gender, children and marginalized populations.

- The NTLP manual has been revised to incorporate paediatric component in a comprehensive manner including TB in special situation such as:
  - MDR –TB management
  - TB/HIV co–infection management

- Recording and reporting tools have been revised to incorporate paediatric age group as per WHO.

- Introduction of Peadiatric TB centre of excellence by MoHSW and ICAP at DSM, which is a learning centre with new advanced diagnostic approaches with consultancy.
The NTLP in collaboration with WHO, USAID, ICAP and other partners have developed pediatric TB guidelines including training manual: Facilitators guide, manual for health care workers and job aids.
Algorithm for Diagnosing Pulmonary TB in Children below 6 years old

**Visit 1**
- **TB suspect**
  - Collect 2 sputum specimen (spot - morning or spot – spot)
  - If sputum specimen is not available, do gastric lavage
  - Offer HIV test (PITC) if status unknown

**Visit 2**
- MTB +/Smear positive
  - Start TB treatment
  - Provide nutritional support
  - HIV care if applicable

- MTB -/ Smear negative
  - Unable to collect sputum specimen
  - Use “Score Chart for Diagnosis of TB in Children”
    - Score < 7
      - Investigate for other conditions
      - Offer HIV test if not performed
      - Give broad spectrum antibiotics and antimalarials (if not yet given)
      - Give nutritional support (if needed)
      - Do chest x-ray
    - Score ≥ 7
      - Start TB treatment
      - Provide nutritional support
      - HIV care if applicable

**Visit 3**
- Symptoms Resolved
  - TB unlikely
- If symptoms persist
  - Repeat “Score Chart for Diagnosis of TB in Children”
Challenges

Programmatic challenges
- Insufficient funds
  - capacity building to HCWs
  - printing and distribution of the guidelines
  - procurement of effective diagnostic tools
- Insufficient human resource for health
- M&E: TB notifications are not disaggregated by paediatric age groups
- No ACSM materials/activities focusing TB in children
- Lack of research targeting children

Clinical challenges
- Lack of adequate capacity to HCWs on management of TB in children
  - low suspicious index to diagnose TB
  - improper management of TB in children
- Difficult in obtaining sputum samples, sometimes requires invasive procedures (GA, IS)
- Bacillary burden is lower and yield from sputum, gastric aspirates and culture is low
Opportunities

- Political commitment
- Presence of guidelines and training materials
- Presence of CoE
- Availability paediatric TB formulations
- Partners supporting implementation of paediatric TB
- Community linkage by FTB for active case finding.
examples of successful activities

- Presence of Pediatric TB CoE
  - consultancy (Pediatrician/Radio
  - improved diagnosis Xpert
  - scaling up of satellites
  - Intensified Case finding
  - Child friendly clubs
  - IPT

- Capacity building to HCWs
  - Trained ToT's -100, HCWs -1400 in 12 regions
examples of successful activities

- Presence of Pediatric TB CoE
  - consultancy (Pediatrician/Radio
  - improved diagnosis Xpert
  - scaling up of satellites
  - Intensified Case finding
  - Child friendly clubs
  - Webinars

- Capacity building to HCWs
  - Trained ToTs –124 , HCWs –1800 in 17 regions
## TB Screening at OPD/IPD/RCH

### Ped CoE

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<tbody>
<tr>
<td>6</td>
<td>% peds <strong>screened for TB</strong> among pediatric patients attended/admitted</td>
<td>19%</td>
<td>63%</td>
<td>92%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
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<td>1,556</td>
<td>8,051</td>
<td>2,935</td>
<td>4,650</td>
</tr>
<tr>
<td>7</td>
<td>% peds who were screened for TB that screen as <strong>TB suspects</strong></td>
<td>14%</td>
<td>14%</td>
<td>5%</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td>220</td>
<td>1,556</td>
<td>404</td>
<td>2,935</td>
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<tr>
<td>8</td>
<td>% peds TB suspect with <strong>IS</strong> performed</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<td></td>
<td>0</td>
<td>220</td>
<td>0</td>
<td>404</td>
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<tr>
<td>9</td>
<td>% peds TB suspect with <strong>GA</strong> performed</td>
<td>60%</td>
<td>77%</td>
<td>92%</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133</td>
<td>220</td>
<td>312</td>
<td>404</td>
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<tr>
<td>10</td>
<td>% peds TB suspect with <strong>CXR</strong> performed</td>
<td>4%</td>
<td>27%</td>
<td>33%</td>
<td></td>
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<tr>
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<td>9</td>
<td>220</td>
<td>108</td>
<td>404</td>
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<tr>
<td>11</td>
<td>% peds with <strong>TB</strong> among TB suspects investigated</td>
<td>16%</td>
<td>8%</td>
<td>19%</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23</td>
<td>142</td>
<td>32</td>
<td>404</td>
</tr>
<tr>
<td>12</td>
<td>% peds TB cases started <strong>anti-TB treatment</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
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<td>23</td>
<td>23</td>
<td>32</td>
<td>32</td>
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### Mwananyamala OPD/IPD/RCH

- TB Screening coverage has enormously improved (96% as Aug13)
- 170/174 peds TB suspects received either GA or CXR (Jul-Aug13)
- 100% TB Treatment uptake
Increased paediatric TB notifications in 6 regions
Next steps

- Scaling CoE model to 5 regions with high TB burden
- Build capacity of HCWs (Training and mentorship)
- Strengthening Lab services.
- Advocacy on Ped Tb/ Community engagement
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