Improving Health System Performance to Address the challenge of Drug-Resistant Tuberculosis

Dr Aleyamma Thomas
Tuberculosis Research Centre (ICMR)
Chennai
Health System Strengthening (HSS)

Defined as any array of initiatives & strategies that improves one or more of the functions of the health system & that leads to better health through improvements in access, coverage, quality, or efficiency

Health Systems Action Network 2006
Health System Strengthening

- HSS - global health priority
- Little common understanding/agreement of what HSS is & how to track the impact of HSS
- Undertake more in-depth analysis of HS capacity
- Better understanding of the constraints in HS will help to find adequate solutions
- TB remains a high priority for HSS
Understand the constraints in health system
## Status of DOTS Plus in India 2007-2010

<table>
<thead>
<tr>
<th>No. of states implementing DOTS Plus</th>
<th>12/(28+7)</th>
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<tbody>
<tr>
<td>MDR suspects examined</td>
<td>19178</td>
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<tr>
<td>MDR TB cases diagnosed</td>
<td>5365</td>
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<tr>
<td>MDR cases initiated on Rx</td>
<td>3610</td>
</tr>
<tr>
<td>Estimated MDR cases in India</td>
<td>99000</td>
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<td>(79-120 000)</td>
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TB India 2011  
Global TB Control 2010
Constraints in HS for TB control

- Inadequate trained staff for management & supervision
- Inadequate accredited lab facilities for DST
- Inappropriate use of drugs by providers & patients
- Inadequate drug regulatory rules: Drugs easily obtainable over-the-counter in many countries
- Uncertain quality of anti-TB drugs in the market
- Inadequate infection control measures
- Limited involvement of non-programme providers & community
Health system strengthening for DR-TB service delivery

- Partnership
- Human resource development
- Laboratory strengthening & networks
- Infection control
- Drugs development
- Information management
Human Resource Development
Human Resource Development

The ultimate goal of HRD for comprehensive TB control is to have the right number of people, with the right skills, in the right place, at the right time, who are motivated & supported to provide the right services to the right people.
## Training

<table>
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<tr>
<th>Target Audience</th>
<th>Physicians, pulmonary specialist, Nurses, Lab Tec, programme managers, Epidemiologist, Social Workers &amp; community outreach workers</th>
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<tbody>
<tr>
<td>Institutions</td>
<td>Schools of Public Health, Medicine, Nursing &amp; other Allied Health Professions</td>
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<tr>
<td>Type of training</td>
<td>Initial training, re-training, on job training, continued education &amp; advanced training in management aspects</td>
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<tr>
<td>Areas of training</td>
<td>Core training, problem solving, Supervision, Management &amp; Planning</td>
</tr>
<tr>
<td>Specialized training</td>
<td>Operations research, Drug management, Treatment of DR-TB &amp; TB-HIV co-infection, Infection control</td>
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In-service Monitoring & Supervision

- Detect performance deficiencies
- Identify new staff in need of training
- Identify additional staff needs for current interventions & for new interventions /strategies
Develop innovative strategy

- Appropriate competencies to effectively deliver DR-TB services
- Developing innovative service delivery strategy
- Optimized use of shared resources
- Coordination between different sectors
Laboratory strengthening & networks
Diagnosis of MDR/XDR TB

Primarily laboratory based
Challenges in diagnosis of DR-TB

- Availability of accredited Lab & trained HR to do DST
- Uninterrupted supply of Quality Reagents
- Supervision & quality assurance system (relationship with SRL established)
- Developing newer tools for more accurate & rapid diagnosis to shorten the turn around time
- Sustainable funding
Need for new tools

- Conventional tests for detection of DR are slow, tedious & difficult to perform under field conditions
- Need simple inexpensive low-tech tools
- Rigorous field evaluations of new tools are needed before taking them to populations that carry a significant proportion of DR burden
Management of patients

- Prevent delay in referring the DR-TB suspects for Dx
- DR-TB patients are initiated on Rx at PMDT site
- Rx is coordinated & monitor by experts of PMDT
- Guidelines for management to be followed uniformly
- Discourage irrational use of I & II line drugs
- DOT to be strictly observed
- Develop standardized counseling approach
Infection control
Infection control

- Need to be prioritized
- Operationalize National guideline for infection control
- Need to be integrated with the general health system
- Provide facilities for early case-detection & management
- Ensure administrative measures are in place for Infection control
- Policy for infection control at community level
Information management

- Improved data quality & reporting
- Robust system to monitor & evaluate multiple health indicators
- To improve data management, collection processes & aids in the analysis
- Disseminate the finding to end users in time
- Utilize the data for further improvement
Partnerships
Need for partnership

- Establish systematic & sustained partnership with organized & unorganized TB care providers & community to achieve:
  - Community awareness
  - Improved access to TB care
  - Reduce patient cost & inconvenience
  - Early case detection
  - Promote rational use of ATT to prevent M/XDR-TB
  - Sustenance of funding
Advocacy, Communication & Social Mobilization

Sensitize policy makers & administrators on the need for:

- adequate & sustained funding for TB control
- sharing of resources with other public health programs
- develop partnerships with other stakeholders
- training of the staff at different levels & retention of the trained staff
- periodic review to identify lacunae & take corrective measures
- TB control to be made a people’s movement

Disseminate the national plan for ACSM to the field staff
Scope for Research
Scope for Research on DR-TB

- **Epidemiology**
  - Rapid surveys to determine the burden of DR-TB
  - Role of Infection control in prevention

- **Basic research**
  - Development of a rapid, sensitive & specific Dx test
  - Development of newer drugs

- **Health system research**
  - Identify the HS constraints for effective utilization of resources
  - Quality of services

- **Clinical Trials**
  - Evaluate new drugs, shorter duration of Rx, establishment of optimal doses

- **Socio-economic Research**
  - Identify behavioral & social factors to improve adherence
  - Cost-effectiveness of interventions to combat DR-TB
Summary

To summarise:

- Ensure adequate & sustainable funding
- Human resource development
- Increasing & strengthening laboratory capacity
- Ensuring information flow & analysis for evidence based policy decisions
- Establish systematic & sustained partnership with all stakeholders
- Implement & monitor infection control
- Encourage research to improve programme
‘If we don’t change the systems, even the best tools may do no good, because they may never get to the people who need them.’

Bill Gates, April 2009
Thank You