Background – Establishing a PPP in India to detect MDR-TB

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October 23, 2019
Public-Private Partnerships for Global Health

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Tuberculosis – top infectious disease killer

TB IS THE TOP INFECTIOUS DISEASE KILLER WORLDWIDE

IN 2018
1.5 MILLION (1.4-1.6 million) PEOPLE DIED FROM TB
INCLUDING 251 000 DEATHS (223 000: 281 000) AMONG PEOPLE WITH HIV

TB IS THE LEADING KILLER OF PEOPLE WITH HIV
AND A MAJOR CAUSE OF DEATH DUE TO ANTIMICROBIAL RESISTANCE

10 MILLION (9.0-11.1 MILLION) PEOPLE FELL ILL WITH TB

5.7 MILLION MEN
3.2 MILLION WOMEN
1.1 MILLION CHILDREN

From WHO Global Tuberculosis Report 2019
Multidrug resistant TB – public health crisis

From WHO Global Tuberculosis Report 2019
Multidrug resistant TB – public health crisis

Treatment outcomes for MDR/RR-TB

- **Year**
  - 2009
  - 2010
  - 2011
  - 2012
  - 2013
  - 2014
  - 2015
  - 2016

- **% of cohort**
  - 0
  - 20
  - 40
  - 60
  - 80
  - 100

- **Legend**
  - **Green**: Treatment success
  - **Red**: Failure
  - **Orange**: Died
  - **Yellow**: Lost to follow-up
  - **Gray**: Not evaluated

From WHO Global Tuberculosis Report 2019
## Complexity of drug-susceptibility testing for TB

<table>
<thead>
<tr>
<th>TB medicines included in the MDR-TB regimens</th>
<th>Phenotypic DST</th>
<th>Molecular DST</th>
<th>Initial diagnostic test/comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A:</strong> Include all the three medicines (unless contraindicated)</td>
<td>Levofoxacin (Lfx) or Moxifloxacin (Mfx)</td>
<td>DST using liquid and solid media</td>
<td>GenoType MTBDRsl, sequencing</td>
</tr>
<tr>
<td></td>
<td>Bedaquiline (Bdq)</td>
<td>DST using liquid media</td>
<td>sequencing, but more evidence is needed</td>
</tr>
<tr>
<td></td>
<td>Linezolid (Lzd)</td>
<td>DST using liquid and solid media</td>
<td>sequencing, but more evidence is needed</td>
</tr>
<tr>
<td><strong>Group B:</strong> Include one or both medicines</td>
<td>Clofazimine (Cfz)</td>
<td>DST using liquid media</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>Cycloserine (CS)/Terizidone (Trd)</td>
<td>Not recommended</td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Group C:</strong> Add when medicines from Group A and B cannot be used</td>
<td>Ethambutol (E)</td>
<td>Not recommended</td>
<td>sequencing, but more evidence is needed</td>
</tr>
<tr>
<td></td>
<td>Delamanid (Dlm)</td>
<td>DST using liquid and solid media</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>Pyrazinamide (Z)</td>
<td>DST using liquid media</td>
<td>sequencing</td>
</tr>
<tr>
<td></td>
<td>Imipenem-cilastatin (Ipm) or Meropenem (Mpm)</td>
<td>Not recommended</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>Amikacin (AM) or Streptomycin</td>
<td>DST using liquid and solid media</td>
<td>GenoType MTBDRsl, sequencing</td>
</tr>
<tr>
<td></td>
<td>Ethionamide (Eto) or Prothionamide (Pto)</td>
<td>Not recommended</td>
<td>sequencing</td>
</tr>
<tr>
<td></td>
<td>p-aminosalicylic acid (PAS)</td>
<td>Not recommended</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Percentage of MDR/RR-TB cases tested for susceptibility to second-line drugs, 2018

India: 66%
Indonesia: 28%
Nigeria: 83%
Philippines: 29%
South Africa: 57%

From WHO Global Tuberculosis Report 2019
Accelerating Action on Tuberculosis Towards Achieving 40x22

Fighting Tuberculosis (TB) is a top priority for the United States Government. The U.S. Agency for International Development’s (USAID) new TB business model, the “Global Accelerator to End Tuberculosis,” will catalyze investments across multiple countries and sectors to end the epidemic while building self-reliance.

USAID has been a leader in the global fight against TB for over two decades and supports anti-TB efforts in more than 50 countries helping to provide TB treatment to more than 13 million people, including over 300,000 suffering from multidrug-resistant TB (MDR-TB). Since 2000, the USAID TB program has achieved a nearly 50 percent reduction in TB-related deaths and, with our partners, we’ve saved more than 54 million lives.
USAID is undertaking a major cultural and operational transformation to expand our engagement with the private sector to achieve outcomes of shared interest and shared value. The Private-Sector Engagement Policy is an Agency-wide call to action, and a mandate to work hand-in-hand with the private sector to design and deliver our development and humanitarian programs across all sectors, and to harness our resources to open markets and other opportunities for U.S. businesses. This policy signals an intentional shift to pursue market-based approaches and investment as a means to accelerate countries’ progress on the Journey to Self-Reliance.

THE CHANGE WE SEEK

This policy signals an intentional shift to pursue market-based approaches and investment as a means to accelerate countries’ progress on the Journey to Self-Reliance. On this basis, the policy calls for USAID and our partners to ask and address the following questions every time we approach a development or humanitarian issue:

- **Can the private sector solve this problem by itself?**
- **Could there be a market-based approach to addressing this challenge?**
- **What are the roles and interests of the private sector in addressing this challenge?**
- **Are there factors constraining the private sector from involvement and investment?**
- **Is there a role for USAID to help alleviate or eliminate these constraints?**
Thank you!

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