“Know Your Epidemic”

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In TB, “One Size Fits None”

Zignol et al, BWHO 2012
Where Is TB Transmitted?
Heterogeneity in MDR-TB

Jenkins et al, ERJ e-pub
Knowledge is Power...
And We Are Weak.

Number of country-year data points on DR-TB, 1994-2010
(Zignol, BWHO 2012)
The Response

What went wrong with India’s TB control

T. JACOB JOHN

The Hindu
Aug, 16, 2013
Different Epidemics: Different Cascades

- Diagnosed
- Cured
- Completed
- Died
- Treatment failed
- Loss to follow up
- Not evaluated
- Grand Total

Year:
- 2009
- 2010
Different Epidemics: Different Outcomes

A. High Incidence Setting

2. Culture for Retreatment
3. Xpert for HIV-Positive
4. Xpert for Smear-Positive
5. Xpert for All
6. Xpert for All, Culture Confirmed
7. MODS/TLA
8. Same-day Microscopy
9. Same-day Xpert

% Change from Baseline (Strategy 1)

-50 -25 0 25 50 75 100

-50 -25 0 25 50 75 100

B. Low Incidence Setting

2. Culture for Retreatment
3. Xpert for HIV-Positive
4. Xpert for Smear-Positive
5. Xpert for All
6. Xpert for All, Culture Confirmed
7. MODS/TLA
8. Same-day Microscopy
9. Same-day Xpert

% Change from Baseline (Strategy 1)
A Way Forward: 3 Steps

• **Step 1: Know Your Epidemic**
  • Surveillance
  • Sources (of TB)
  • Systems
A Way Forward: 3 Steps

• **Step 2: Know Your Local Options**
  • Tools
  • Teams
  • Trust
A Way Forward: 3 Steps

• **Step 3: Make The Match**
  • Put your effort where your epidemic is.
  • Use the “trusted teams and tools” to target the sources of transmission.
  • Normalize the hotspots.
Summary

• In TB control, one size fits none.
• Knowledge is power: we need more.
• 3 Steps Forward:
  • Know Your Epidemic
  • Know Your Local Options
  • Make The Match
• The global TB community must develop flexible tools to advance local-level knowledge & solutions, not aim for a global “one size fits all” policy package.