Reality check: Perspectives from the field on OPPORTUNITIES for technology and innovation

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- Capacity to diagnose and capacity to treat: the balance is shifting
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- Cases estimated: 350,000
- Detected with TB: 100,000
- Diagnosed with MDR-TB: 5,000

With estimated 45% case detection rate and 5% DST coverage.
Scale-up of MDR-TB management
Countries ranking 1 to 10 of the 27 MDR high priority countries

- India
- China
- Russian Federation
- South Africa
- Kazakhstan
- Pakistan
- Bangladesh
- Uzbekistan
- Nigeria
- Philippines

Number of MDR-TB cases assuming all notified ss pos cases receive DST
Number of MDR-TB cases, 2007
Number of ss+ MDR-TB cases expected to be treated
FIND deliverables for 3 levels of the health system

- Symptoms
  - Smear: 60%
  - LED: +10%
  - LAMP: +25%
  - Xpert: +40%
- Time to response
  - LJ: 40d
  - MGIT: 15d
  - MTBDR+: 1d
- Sensitivity
  - LED: +10%
  - LAMP: +25%
  - Xpert: +40%
- Point of care
  - AG/AB
  - Molecular
  - Enose
Other innovations

- Electronic information systems linking case-detection, cohort-analysis and procurement in all sites
- Active case-finding / contact tracing
- Infection control policies / technologies
- New drugs (and new regimens)
- Need for trials

A new global TB control strategy, but the same workforce
Reality check 1: do we embrace progress made?

Absolutely, most of us recognize opportunities
- Increased TB case detection
- Less delay to identify drug-resistance
- Diagnosis of smear negative TB
- Increased survival of HIV co-infected TB patients
- Decentralization of diagnosis of (resistant) TB!
- Less false positive TB diagnosis (HIV related)
- Easier drug resistance surveillance
- Diagnostic platforms (funding, human resources, integration)
Reality check 2

Is laboratory network design informed by programmatic vision (and realities) and epidemiological evidence?

- The reality and needs in the field
  - Coordination at country level often sub-optimal
  - NTP and lab under different departments; parastatal and private labs
  - Often many international partners, but no coordination
  - Often little integration between disease programmes
  - Joint lab network planning crucial to cover and monitor
    - Estimated MDR-TB case-load
    - Actual notification: smear negative and positive TB
    - DRS data (FL and SLD-resistance in patient categories)
    - Diagnostic algorithm and programme design
    - Applications to GF and other donors (diagnose and manage cases)
    - Private public mix models
    - Advocacy for Progress with developments of new technologies
    - Consensus on technical requirements: BSL 2+, 3, 2.7 …
Reality check 3:

Are programmes and partners ready to respond?

Actions needed:

– overcome (natural) resistance to change with both countries and technical partners: priority-setting, NTP capacity..
– develop new diagnostic algorithms and programme design
– address HRD implications (human resources, training)
– Link up with ‘strangers’ (Flu, HIV, PPM, academic setting)
– Address global second-line drug supply crisis
– address imbalance between capacity to diagnose and capacity to treat
– Assist national manufacturers to meet QA requirements

Urgent need to set up country DR-TB coordinating and technical assistance mechanisms
Resistance Pattern of patients enrolled in first GLC programmes

- Patients resistant to HRES and second-line drugs
- Patients resistant to HRES
- Patients resistant to HR only

Estonia | Latvia | Orel | Peru | Philippines | Tomsk

0% | 20% | 40% | 60% | 80% | 100%
NAMPOWER yesterday pulled the plug on Bethanie village in the South after the Village Council was unable to settle its debt in full by noon.

NamPower’s Manager of Marketing and Corporate Communications, John Kaimu, yesterday confirmed that the power supply to the village had been suspended.

According to Kaimu, the Village Council failed to honour its agreement with the power utility.

In a statement late yesterday, the Bethanie Taxpayers’ Association (BTA) said the move could deal a devastating blow to the village.

*LUQMAN CLOETE*

SUPER BUG DISCOVERED... An eight-month-old child sits outside the Church of Scotland Hospital in Tugela Ferry, South Africa, where a killer strain of drug resistant TB has been discovered.

**New killer TB crossing SA border**

JOHANNESBURG – A killer strain of extremely drug-resistant tuberculosis has been found in at least 28 hospitals across South Africa and almost certainly has spilled across borders, according to a specialist.

The virtually untreatable superbug could jeopardise efforts to deal with the AIDS pandemic, say experts. And, the doctor who discovered the new strain in KwaZulu-Natal noted it was so virulent that patients died even before doctors received the results of their tests.

Experts note that TB diagnostics haven’t changed in 100 years and TB medication in 50 years. They blame the fact that it’s largely a disease of the poor – often spread by overcrowding when an infected person sneezes or coughs and the airborne bacteria infect someone else.

**KILLER:** cont. on page 2
The weakest link determines pace of scale-up to the 2015 Global Plan targets

- **Governments**
  - Funding & Workforce
  - Framework elements
    - lab, DRS: measure!
    - quality assured drugs
    - public private mix
    - HIV/TB cross-referral
    - information systems

- **STB Partnership**
  - Coordination and M&E !!
  - Donor mobilization
  - Technical support models
  - New tools
  - Access to QA drugs
Conclusions

- **Excellent progress, but threat of imbalance!**
  - capacity to diagnose ≠ capacity to treat ≠ drugs ≠ funding
  - coordinating mechanism that includes
    - An overall coordinating body under the STP Board with involvement of the Core Group of the MDR-TB WG and the GLI
    - Coordination within WHO (secretariats of WGs and subgroups)
    - mirrored by coordinating bodies at national level

- **New models required**
  - aggressive technical assistance (learning by doing: need to evaluate)
  - involving private providers, public hospitals, private labs...
  - funding (global and country levels)
  - GLC procurement and GLC approval for countries that want to procure outside GDF (streams of engagement)

**Show donors and countries that we (can) move**
Thank you for your attention

Looking forward to a lively discussion.