Africa Regional TB summit

4-6 March, 2019 | Kigali, Rwanda

Theme: *It’s time for Africa to step up efforts to find all missing people with TB*
TB case finding in Health Facilities in Tanzania through QI TB model

African Regional TB Summit post- UNHLM: Step up effort to find all people with TB

Serena Hotel, Kigali, Rwanda 4th – 6th March, 2019

Drs L. Mleoh & D. Kamara
Low TB case detection in Tanzania

- Tanzania is among the 30 WHO identified high TB burden countries in the world
- Estimated TB prevalence and case detection rate:

<table>
<thead>
<tr>
<th></th>
<th>Estimated TB prevalence</th>
<th>case detection rate</th>
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<tbody>
<tr>
<td>Before PST 2014</td>
<td>172/100,000</td>
<td>79%</td>
</tr>
<tr>
<td>After PST (WHO report, 2015)</td>
<td>528/100,000</td>
<td>36%</td>
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</tbody>
</table>

- Tanzania is among 13 countries contributing 77% of TB cases in the African region
- Tanzania among 13 countries contributing 75% of world TB missed cases
TB Situation in Tanzania (2017 DATA: 2018 WHO GTB)

- 154,000 became sick with TB
- 68,500 (44%) were initiated on treatment
- 61,650 (90%) were successfully treated

An estimated 85,000 new TB cases are not detected each year

An estimated 47/100,000 (27,000) TB Mortality
QITB in Health Facilities

- Analysis of reports from various TB case finding projects: PATH, MSH, CDC/PEPFAR, Supervision reports
- Showed – some health facilities had increased notifications compared to other HFs within the same area
- Identified quality interventions and approaches contributing to increased notifications
- Innovations/approaches were not well structured and not consistently implemented
- QI TB model makes HFs be more responsive to systematic TB screening to all at all entry points
- QI TB optimizes approaches to address barriers to TB diagnosis and case notifications at HFs
Process of QI Implementation

1. National Assessment to identify barriers and best practices for TB case detection (Feb 2016)

2. Development of Toolkit for Quality Improvement (QI) in TB case detection (Feb-March 2016)

3. Development of training packages, tools and job aides for QI in TB case detection (Feb-June 2016)

4. Training of TOT, review of materials, regional trainings of health managers and providers from selected health facilities (April – June 2016)

5. One year Pilot in 2 regions July 2016 – June 2017 (Close follow up and mentorship visits)
6. Political and High level MoHCDGEC leadership commitment and policy guidance /enforcement

7. Roll out of QI TB to 16 regions, 48 districts, 187 health facilities (3-4 HFs per district council) – Jan - Dec 2017

8. National Review meeting (MoH and DP/IPs) – July 2017

9. Roll out of QI TB to 10 regions in collaboration with other IPs July- Dec 2017

10. Review and disseminate QI TB experiences

11. Update of national TB policy guidelines - 2018
Examples of some innovative HFs as were picked during initial assessments

Example 1: - Meru district Hospital, Arusha

- **Performance:** increased by 110% over a period of 4 years between 2011 and 2014 (i.e. 143 cases in 2010 to 301 in 2014)

**TB case detection in Meru District Hospital**
Selection Of Initial Participating Regions
TB NOTIFICATION RATE BY REGION, 2015

Regions
Dar Temeke
Dar Kinondoni
Shinyanga
Manyara
Lindi
Morogoro
Mwanza
Mbeya
Tanzania
Tanga
Ruvuma
Singida
Tabora
Unguja
Pemba
Kigoma

Notification rate/100,000
Identified Barriers to TB case Detection in Health facilities

1. Poor leadership for active TB case finding within facilities
2. Inadequate TB screening among most at risk groups
3. Low TB suspicion index and commitment in TB case detection among health workers
4. Low usage of diagnostic algorithms including pediatric algorithms/score chart for diagnosis of TB in children by HCWs
5. Weak referral and linkages systems
6. Challenges in diagnosis TB in children
6. Limited number / Unequal distribution of TB laboratory diagnostic services i.e. Smear microscopy, rapid molecular tests; and limited X-ray services and lack of radiologists to interpret results
Four Key Components of QI TB

1. Improve organization and TB case management including case detection activities
2. Increase access to TB screening/services within health facilities
3. Improve access to TB diagnosis within health facilities
4. Strengthen Health facilities outreach activities to increase access to TB case detection i.e. Facility – Community network
Intervention Package

- Capacity building
  - Health facility managers – QITB basics and Key policy issues
  - TB Focal Persons - roles and responsibilities
  - Best performing facility staff - Mentorship and Monitoring
  - Coordinators - Basics and key policy issues
- Coordination and Integration
  - Focal Persons and Teams
  - Clinical meetings and CME
  - Quality Improvement Teams and WITs – Health Facility
  - Health Facility Exchange – Departments and Clinics
  - Region experience sharing forum - Implementing Districts
  - National review forum - Regions and Partners
Intervention Package ...

- Printing and distribution of the developed materials
  - Toolkit
  - Job Aides
  - IEC

- Monitoring and Mentorship
  - National QI Mentorship team - consultative mentorship
  - District QI Mentorship teams – presumptive TB register use, TB screening and TB case enrollment
  - Data clerks at CU – assigned specific regions for man to man follow up
Mentorship session at Bwanga Health Centre in Geita region.
Changes

- Screen ALL
- Provider Initiated TB screening (PITS)
- Presumptive TB register
- TB focal persons (TBFP) @ HF/clinic/section
- Filling of Sputum examination request form – by all clinics
- Sputum samples collection at each point of entry
- No more patient to lab but specimen by TBFP
- Lab results to requesting clinician/clinic NOT to patient
- All lab negative results fully investigated
- All TB +ve guided to TB clinic and started on treatment
- All most at risk and their families screened regularly and as scheduled
- Core business of QIT/WITs
- Regular Peer monitoring and mentorship
- Periodic review meeting & experience sharing at HF and regional levels
- All presumptive from community directed straight to TB clinic
- Contact investigation for all bacteriologically confirmed patients
ACHIEVEMENTS
Trend of all forms TB case and DR TB notifications

- **TB case notifications:**
  - 2012: 63892
  - 2013: 65732
  - 2014: 63151
  - 2015: 62180
  - 2016: 65902
  - 2017: 69819
  - 2018: 75845

- **DR TB notifications:**
  - 2009: 15
  - 2010: 77
  - 2011: 87
  - 2012: 45
  - 2013: 95
  - 2014: 194
  - 2015: 176
  - 2016: 196
  - 2017: 200
  - 2018: 449
## Tanzania

<table>
<thead>
<tr>
<th>Category</th>
<th>2016</th>
<th>2017</th>
<th>2018  To date</th>
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<tbody>
<tr>
<td><strong>Notifications</strong></td>
<td>65,908</td>
<td>69,818</td>
<td>75,845 (Feb 2019)</td>
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<td><strong>Target (NSP)</strong></td>
<td>71,866</td>
<td>74,645</td>
<td>77,509</td>
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<td><strong>MDR</strong></td>
<td>158</td>
<td>167</td>
<td>449</td>
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<tr>
<td><strong>Target</strong></td>
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<td>471</td>
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<tr>
<td><strong>Xpert sites</strong></td>
<td>70</td>
<td>74</td>
<td>218</td>
</tr>
<tr>
<td><strong>Target</strong></td>
<td>165</td>
<td>165</td>
<td>195</td>
</tr>
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TRENDS OF TB CASES NOTIFIED QI vs non-QI REGIONS, JANUARY 2016 TO JUNE 2018
DEVELOPED TOOLS

• QI TB TOOL KIT FOR HEALTH FACILITIES

• FLI CHARTS

• PRESumptive REGISTER

• BOOKLETS

• IEC

• Monitoring/Mentorship checklist and Reporting forms
Official Inauguration of the Presumptive TB Register and QI TB Toolkit in Dodoma, July, 2018
Progress so far in scale-up

- All regions implementing QI since 4th quarter 2017
- Regionalization
  - GF- 16 regions
  - Boresha Afya USAID – 10 regions
- Shared results with TB, TB/HIV, HIV and other health IPs, UNION conf2018, documentation, etc
- Series of the planning meetings with DPs and IPs for QI TB roll out
- Some integration of QITB by HIV C&S partners
- Update of TB policy guidelines
CHALLENGES
Key Challenges

- Relatively new way of doing business requiring close follow up and mentorship
  - Slow uptake, incompleteness of presumptive TB registers

- Varying levels of implementing QI package by IPs
  - Few HFVs and providers trained
  - Low levels of support for HFVs coordination meetings and district mentorship

- Inadequate use of generated data from case based ETL for local use at health facilities, district and regional levels
  - Low capacity analysis and interpretation

- Low coverage of HF implementing QI (4 → 10 per district council)
LESSONS LEARNT
Lessons Learned

1. Commitment and leadership at the local implementing levels (facilities, districts) are key in successful implementation of TB case finding methods

2. Uniform and consistent application of standardized patient pathways through cascade of care are useful in increasing TB case finding in health facilities
   - Intensified Systematic TB screening in all units and key entry points of HF and follow up to diagnosis

3. Targets setting at regional, district and facility level is key in stimulating efforts in TB case detection

4. Use of data at the local level to is key for monitoring progress of implementation of TB case finding interventions

5. Close follow up and mentorship visits is crucial especially at initial stages of QI

6. Combination of innovative approaches resulting in higher yields

7. Multiplier effects; Increasing Xpert utilization & DR-TB cases detected
TB case detections for Magomeni HC and Makole HC

- Magomeni Health Center
- Makole Urban Health Centre

Start of QI TB initiative

- DEDICATED HF LEADERSHIP
- COMMUNITY INTERVENTIONS
- CONTACT TRACING
- SCREENING CAMPAIGNS
- COMMUNITY VOLUNTEERS - HF INTEGRATION WITH RCH

Jan - March 2017: 87
April - June 2017: 91
July - Sept 2017: 72
Oct - Dec 2017: 73
Jan - March 2018: 243
April - June 2018: 257
July - Sept 2018: 232
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