Impact of TB Infection Control Implementation on Health Workers in Afghanistan, 2011

Afghanistan’s TB Control Need

- The risk of tuberculosis (TB) infection is higher among health care staff compared to the general population.
- There was a need to improve safety in health facility environments to reduce the risk of TB infection for:
  - Health care staff
  - Clients
  - Communities
- Health facilities in Afghanistan are poorly designed for TB infection control (IC).
- Most health workers have a poor knowledge of TB IC strategies.

The National Response

- The USAID-funded TB CARE I project with the National TB Program (NTP) improved TB IC in 45 health facilities by:
  - Screening clients for TB at health facility entrances and waiting areas,
  - Directing people with TB symptoms to TB treatment areas and laboratory rooms,
  - Redesigning rooms to ensure natural and mechanical ventilation,
  - Using mechanical ventilation to ensure airflow.

Evaluating Impact

- TB CARE I and NTP assessed the impact of TB IC:
  - In November 2011 in Kabul and Khost provinces
  - Among 240 health workers from 10 hospitals in high-risk areas
  - Used the World Health Organization’s staff risk assessment log to record symptoms, HIV status, TB infection, etc.
  - Offered X-rays and testing to health workers

Assessment Results: Low TB Infection in Facilities with TB Infection Control Measures

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Intervention area (with TB IC)</th>
<th>Control area (without TB IC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Staff with TB symptoms</td>
<td>(13) 11%</td>
<td>(21) 18%</td>
</tr>
<tr>
<td>Staff diagnosed with TB</td>
<td>(3) 27%</td>
<td>(7) 31%</td>
</tr>
<tr>
<td>Staff providing daily treatment to TB patients who were diagnosed with TB</td>
<td>8%</td>
<td>19%</td>
</tr>
<tr>
<td>Lab technicians who were diagnosed with TB</td>
<td>12%</td>
<td>29%</td>
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</tbody>
</table>

Conclusion

- TB IC significantly reduced the risk of TB infection for health workers.
- Because TB incidence is higher among health workers, TB IC should be expanded to other health facilities in similar settings.

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For more information, please contact:
Amanullah Momand, MD, Technical Advisor, TB CARE I, Afghanistan; Tel: +93 700 607 345 Email: amomand@gmail.com