TB Control in Urban Settings: Urban DOTS contribution to treatment outcome of new sputum smear positive TB cases in Kabul city, 2008 – 2011

Kabul’s Poor Health Conditions
- Health infrastructure insufficient to reach 5 million residents
- Poor tuberculosis (TB) service delivery
- Low TB treatment success rate = 46%
- High TB treatment transfer out rate = 46%

TB CARE I Measures TB CAP’s Impact
- USAID-funded TB CARE I project is the follow-on to TB CAP.
- TB CARE I worked with National TB Program to measure the success of TB CAP’s urban DOTS intervention.
- Collected TB data from 56 health facilities
- Compared treatment outcomes from:
  - 2008: pre-intervention
  - 2009: intervention (began in July)
  - 2010/2011: post-intervention

TB CAP Responds
- USAID-funded Tuberculosis Control Assistance Program (TB CAP) introduced the urban directly observed treatment, short course (DOTS) program.
- The program engaged both the public and private sectors in DOTS implementation in Kabul.
- TB CAP conducted the following interventions:
  - Trained health facility staffs on DOTS
  - Conducted regular monitoring/supervision visits
  - Improved coordination and collaboration between the public and private sectors
  - Renovated facilities to provide a safer working environment for staff

<table>
<thead>
<tr>
<th>Treatment Outcomes in New TB Sputum Smear Positive Cases</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011 (1st Q)</th>
<th>Percentage Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB Treatment Success Rate</td>
<td>410  (47%)</td>
<td>383  (44%)</td>
<td>642  (62%)</td>
<td>170  (70%)</td>
<td>33%</td>
</tr>
<tr>
<td>Transfer Out of TB Treatment Rate</td>
<td>397  (46%)</td>
<td>387  (46%)</td>
<td>270  (26%)</td>
<td>55   (23%)</td>
<td>23%</td>
</tr>
<tr>
<td>Death Rate</td>
<td>17   (2%)</td>
<td>18   (2%)</td>
<td>22   (3%)</td>
<td>2    (1%)</td>
<td>1%</td>
</tr>
<tr>
<td>Treatment Failure Rate</td>
<td>23   (3%)</td>
<td>41   (4%)</td>
<td>31   (5%)</td>
<td>3    (2%)</td>
<td>1%</td>
</tr>
</tbody>
</table>


Trend of Treatment Success Rate of New Sputum Smear Positive TB Cases in Kabul 2007 – 2011

Conclusion
- Urban DOTS helped to significantly improve TB treatment outcomes in Kabul city (see table and graphs).

Recommendations
- Urban DOTS should be expanded in similar settings to improve TB case detection and treatment outcomes by engaging both the private and public sectors in DOTS implementation.

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