Engaging the Pharmacy Sector in TB Control: Country Experiences

7th PPM Subgroup Meeting
Lille, France
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D’Arcy Richardson
TB Team Leader
PATH
• The process of engagement: What do pharmacies do for TB control, and how?

• The results: Public-private mix projects engaging pharmacies in India, Cambodia, Vietnam, & Tanzania.

• Key considerations: What are the essential elements of successful pharmacy collaborations?
Why engage pharmacies in TB control?

- Often act as the **first point of contact** with the health system in many countries
- **Accessible** to populations that are vulnerable to TB
- Provide **client-friendly** services
- Can play a number of critical roles, e.g., **identifying** people with symptoms, providing ongoing **treatment support**, limiting dispensing of **TB drugs** to prescriptions only, thus contributing to DR-TB prevention.
Key Roles and Activities

- Pharmacy engagement is often part of “Public-Private Mix” activities of the national TB control program.

- **Roles and responsibilities determined in consultation** with the NTP and formalized through an MOU at pharmacy facility and/or pharmacy association levels.

- **Training, tools and supportive supervision** provided by NTP/public health system and technical assistance organizations and possibly local NGO’s.

- Pharmacies **trained to identify people with TB symptoms**, provide basic information, refer the individual to a nearby clinic for evaluation, record the information, and in some cases provide directly observed therapy (DOT).
A Common Model for Initial PPM Activities

Referral System

Public Hospital Health Center

Diagnosis, Treatment, Recording & Reporting

Private clinic

Pharmacy/Depot

Private lab

Community
Key PPM Activities

• Develop a PPM strategy and guidelines
• Develop referral tools and align them with national recording and reporting forms
• Develop training curriculum for pharmacies and client information materials
• Conduct sensitization workshops for public and private providers and sign an MoU for collaboration
• Train private and public sector providers on the referral system
• Engage with local NGOs
• Conduct quarterly Public-Private Partner exchange meetings
• Facilitate pharmacy staff field visits to DOTS services
• Conduct monthly referral tracking activities and supportive supervision with feedback
India Pilot Project Orientation
## India Pilot Project Results

<table>
<thead>
<tr>
<th>No. Chemists trained</th>
<th>No. chemists referring</th>
<th>Tot no. referred suspects</th>
<th>Tot referred suspects reaching DMC</th>
<th>Referred suspects identified as TB cases</th>
<th>Av. # suspects referred per chemist</th>
<th>Range: number of referrals per chemist</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>32</td>
<td>117</td>
<td>104 (89%)</td>
<td>6 (6%)</td>
<td>4</td>
<td>1 to 28</td>
</tr>
</tbody>
</table>

### Chemist Referral Contribution to Suspect Identification

- **104 (5%)**
- **1978 (95%)**

- All suspects not referred by chemists
- Chemist referred suspects

### Chemist Referral Contribution to Case Detection

- **6 (2%)**
- **290 (98%)**

- All TB positive not referred by chemists
- Chemist referred TB positive
India Data & Notable Findings

Chemist & Druggist Responses to Questionnaire

- 100% (n=29) said the time needed to identify and refer TB suspects is acceptable
- 100% (n=29) said they felt they had a responsibility to identify and refer suspects and are willing to continue program
- 90% (n=19) of clients interviewed said the chemist has asked them about their cough, 81% asked about other TB symptoms
- 100% (n=21) of clients were satisfied with chemists’ service

Training

<table>
<thead>
<tr>
<th>Chemist/Druggist Sensitization &amp; Training Results</th>
<th>Trained N=32 (correct answer)</th>
<th>Untrained N=26 (correct answer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State primary TB symptom as cough &gt; 2 weeks</td>
<td>97%</td>
<td>0%</td>
</tr>
<tr>
<td>Able to state 3 TB symptoms</td>
<td>97%</td>
<td>4%</td>
</tr>
<tr>
<td>Spread when someone with TB coughs/sneezes with uncovered mouth</td>
<td>94%</td>
<td>31%</td>
</tr>
<tr>
<td>Is TB Treatable</td>
<td>100%</td>
<td>31%</td>
</tr>
<tr>
<td>Chemists/druggists have role to play in TB suspect identification &amp; referral</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Recommendations

• **Potential for significant absolute numbers** of additional cases being detected in highly populous areas through chemists.

• Key strength has been **involvement of District TB Control Officer and Drug Controller**. Good potential for long-term sustainability.

• More information required on treatment seeking behaviors, which will differ from other countries and may affect results.

• Modify sensitization meeting structure and agreement process to increase chemist/druggist participation.

• Increase NGO/CBO involvement. Possible areas include client follow up, assistance with referral process.

• Potential for more chemists/druggist to become DOT providers. **76% of clients interviewed** listed a chemist/druggist as their first preference for DOT provision.
### Vietnam PPM: Pharmacy referrals

<table>
<thead>
<tr>
<th></th>
<th>Year 1 (1 site)</th>
<th>Year 2 (4 sites with only 6 months of data for 3 of them)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of referred clients who reached evaluation</td>
<td>978</td>
<td>2709</td>
</tr>
<tr>
<td>Diagnosed as TB cases</td>
<td>314 (32%)</td>
<td>633 (23%)</td>
</tr>
<tr>
<td>SS+</td>
<td>96 (10%)</td>
<td>274 (10%)</td>
</tr>
</tbody>
</table>
Cambodia PPM sites

2004-2005
2 ODs in Phnom Penh

2005-2006
Total 4 ODs in Phnom Penh, Sihanouk Ville and Kampong Cham provinces

2006-2007
Kandal, Takeo and Kampong Speu province

2008-2009
Pursat, Kratie, Battambang, Siem Ream, Banthey Meanchey provinces
Growth in PPM Engagement in Cambodia

Private Provider in PPM Network by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Pharmacy</th>
<th>Cabinet</th>
<th>Laboratory</th>
<th>Clinic</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 04-05 (2 ODs)</td>
<td>130</td>
<td>353</td>
<td>783</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 05-06 (15 ODs)</td>
<td>783</td>
<td>353</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 06-07 (29 ODs)</td>
<td>783</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 07-08 (29 ODs)</td>
<td>0</td>
<td>0</td>
<td>988</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 08-09 (38 ODs)</td>
<td>0</td>
<td>456</td>
<td>1054</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FY 09-10 (37 ODs)</td>
<td>0</td>
<td>451</td>
<td>1,047</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Number of referral, number of reported as having attend DOTS and TB case

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Referral</th>
<th>Reported</th>
<th>TB case</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 04-05 (2 ODs)</td>
<td>199</td>
<td>94</td>
<td>14</td>
</tr>
<tr>
<td>FY 05-06 (15 ODs)</td>
<td>1,268</td>
<td>668</td>
<td>92</td>
</tr>
<tr>
<td>FY 06-07 (29 ODs)</td>
<td>4,262</td>
<td>1,899</td>
<td>264</td>
</tr>
<tr>
<td>FY 07-08 (29 ODs)</td>
<td>2,950</td>
<td>1,489</td>
<td>256</td>
</tr>
<tr>
<td>FY 08-09 (38 ODs)</td>
<td>9,043</td>
<td>4,487</td>
<td>737</td>
</tr>
<tr>
<td>FY 09-10 (37 ODs)</td>
<td>8,325</td>
<td>4,704</td>
<td>867</td>
</tr>
</tbody>
</table>
Referral activity, referrals reported as having attended DOTS, and TB cases AF (by province, FY10-11)

- Phnom Penh (4 ODs): Referral 547, Reported 333, TB case 82
- Kandal (5 ODs): Referral 643, Reported 458, TB case 96
- Takeo (5 ODs): Referral 427, Reported 222, TB case 20
- Kampong Speu (1 OD): Referral 142, Reported 78, TB case 9
- Sihanoukville (2 Khans): Referral 28, Reported 25, TB case 4
- Kampong Cham (10 ODs): Referral 594, Reported 80, TB case 13
- Battambong (1 OD): Referral 359, Reported 271, TB case 43
- Siem Reap (1 OD): Referral 249, Reported 209, TB case 36

Legend: Referral in blue, Reported in green, TB case in red
Tanzania PPM/ACSM Project

- Suite of ACSM/PPM interventions aimed at increasing case detection in Kisarawe District
- Targets schools, traditional healers, pharmacies, community workers, and sputum fixers
- Includes standard and tailored data collection to measure outcomes and impact
From January 2010 – March 2011:

- PHARMACISTS: 369 suspects identified, 355 referrals made, 90 TB cases diagnosed (all forms), all 90 started treatment
- TRADITIONAL HEALERS: 236 suspects identified, 225 referrals made, 53 TB cases diagnosed (all forms), all 53 started treatment
- Approximately 30% of new smear-positive cases first sought care from a pharmacist, another 30% from a traditional healer
- More than 80% reported being reached by an ACSM intervention (street theater, posters, t-shirts, etc.)
Key Lessons Learned

- Pharmacies **can make a notable contribution** to TB case-finding (and potentially to treatment success) and are often motivated to do so without financial compensation.

- **Active engagement of pharmacy associations** at national and local levels and the public health system as equal partners contributes to success and sustainability.

- Successful implementation requires **intensive engagement** in the initial stages and ongoing support and recognition to maintain performance.

- Identification of clients likely to have TB improves over time through feedback and ongoing reinforcement and can yield excellent results—**quality referrals**.

- Model works **best in urban areas** with high concentrations of populations at risk for TB, **more difficult in rural areas**.
Acknowledgments

- USAID: Susan Bacheller, Kate Crawford, Chantha Chak, Jonathan Ross, K. Hemachandran, Amy Piatek
- Cambodia, India, Vietnam, and Tanzania NTPs
- Pharmacy Association of Cambodia
- STO Andhra Pradesh and DTO Ongole.
- Chemist & Druggist Association of Ongole
- District Collector & Drug Controller of Ongole, Andhra Pradesh
- PATH India, Cambodia, Vietnam, and Tanzania teams, especially Satish Kaipilyawar, Hara Mihalea, Tope Adepoyibi, Mohammed Makame, Godwin Munuo, Charlotte Colvin, Le Nga
- Rebecca Furth, Initiatives Inc.
“My clients are poor, they have less than me. TB is very dangerous and costly, it can kill the family and can spread in the community. I’m not rich and I cannot donate money but when I refer my clients to TB services I make merit, especially if my client has TB”.

Drug Controller and District TB Officer giving an award for highest number of referrals. Text message from the DTC, a phone call from STO.