Promoting public–private mix for TB-DOTS: a multi-country study from the WHO Eastern Mediterranean Region

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ABSTRACT This study was carried out to document the implementation status of public–private mix (PPM) in 6 member countries of the World Health Organization Eastern Mediterranean Region, with a particular focus on advocacy, communication and social mobilization (ACSM) specific to PPM. Interviews and focus group discussions were held with staff of national tuberculosis control programmes and partners. Four PPM models were being practised. For all models, ACSM specific to PPM was at the elementary stage. Participants perceived that promoting private partners was difficult, specific policy guidelines were deficient and human resources and capacity for both initiatives were lacking across the region. Building ACSM capacity is required along with the development of guidelines and the implementation of country-specific communication plans to carry out local-level advocacy, strategic communication and effective social mobilization to maximize the benefits of PPM.

Promotion d’un partenariat public-privé pour le traitement de la tuberculose de brève durée sous observation directe (DOTS) : une étude multipays dans la Région OMS de la Méditerranée orientale

RÉSUMÉ La présente étude a été menée pour documenter le statut de mise en œuvre du partenariat public-privé dans six pays membres de la Région OMS de la Méditerranée orientale, avec une attention particulière pour la sensibilisation, la communication et la mobilisation sociale (SCMS) propres au partenariat. Des entretiens et des groupes de discussion thématiques ont été organisés avec le personnel des programmes nationaux de lutte contre la tuberculose et les partenaires. Quatre modèles de partenariat public-privé ont été mis en pratique. Pour tous les modèles, les activités de SCMS spécifiques au partenariat étaient à un stade élementaire. Les participants perçfaient la promotion des partenariats privés comme difficile, les directives politiques spécifiques comme déficientes et les ressources humaines et les capacités pour les deux initiatives comme insuffisantes dans l’ensemble de la Région. Le renforcement des capacités en matière de SCMS est requis ainsi que l’élaboration de directives et la mise en œuvre de plans de communication spécifiques aux pays pour mener à bien la sensibilisation, la communication stratégique et une mobilisation sociale efficace au niveau local et optimiser les bénéfices du partenariat public-privé.

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Introduction

Global incidence, prevalence and mortality due to tuberculosis (TB) are falling, albeit slowly [1]. This reduction has been achieved following the implementation of many strategic steps, one of which is engaging all forms of health-care providers in TB control. According to the most recent report by the World Health Organization (WHO) [1], this engagement, termed public-private mix (PPM), resulted in around one fifth to one third of case notifications in 2009 in 15 countries where PPM was implemented. To achieve the target of halving the 1990 prevalence rate by 2015, further intensification of efforts including implementation of PPM in many other countries has been recommended in the WHO report.

The innovation of PPM aims at maximizing the implementation of directly observed treatment short course (DOTS), a revolutionary step introduced in 1991, which helped achieve the targets of global TB control. Building on the successful implementation of DOTS over 15 years, a new strategy was formulated in 2006 with PPM included as component 4 of this revised strategy [2]. PPM was introduced following the recognition that DOTS services provided by the public sector national TB programmes (NTPs) were not enough, and many patients with symptoms of TB were receiving care from outside the network of NTP services. It was envisaged that involving all stakeholders belonging to various segment of the public and private sectors would expand diagnostic as well as treatment services for TB [3].

Envisioning a TB-free world, the new strategy also aimed at empowering people and communities with TB (component 5) through advocacy, communication and social mobilization (ACSM) [4]. Advocacy is ensuring political and financial commitment to place TB high on the development agenda and to involve the people affected and their communities. Communication aims at facilitating dialogue and information sharing, helping people to understand and to influence positively their health-related behaviour, while social mobilization is promotion of the active involvement of people with TB and communities in health initiatives [5]. Combined, ACSM aims at raising awareness among individuals and communities, and promoting DOTS services to facilitate the implementation of all 6 components of the Stop-TB strategy [6].

The WHO provided guidelines on PPM and ACSM, following which member countries were expected to develop and implement their national plans and strategies [3,6]. While experiences have been shared from implementation and evaluation of PPM [7,8], fewer published studies are available on ACSM [9], and virtually none on ACSM specific to PPM. We carried out a study to document the overall implementation status of PPM in 6 countries associated with the Eastern Mediterranean Regional Office (EMRO) of the WHO, with a particular focus on ACSM specific to PPM. An effort was made to identify the linkages and complementarities between the 2 components and how countries were using these interlinkages. This paper describes the status of ACSM with reference to PPM, challenges faced by these components and suggestions to address these challenges.

Methods

Study design

The study aimed at exploring the status of PPM and ACSM in 6 countries of the region, and how countries were dealing with combination of the 2 innovative ideas. A qualitative study design was adopted to capture the naturally occurring events in a programme setting, a method that effectively uncovers the significance that participants ascribe to programme structures, processes, events, and outcomes [10]. Prospective respondents were busy professionals; therefore individual interview was selected as the main method for recording participants’ experiences, perceptions and views about the issues under discussion. Focus group discussions were also planned; the objective of these was to brainstorm potential ideas about the role of ACSM specific to PPM.

Population and sampling

We purposively selected 6 countries that had a combination of higher incidence of TB, a considerable role of the private sector in overall healthcare, and reported ACSM activities by the NTP. Potential participants who could bring diversity of experience and opinion to this study were contacted through email; these included NTP managers, deputy managers, PPM and ACSM focal persons, other senior NTP members, representatives of partner non-governmental organizations (NGOs), and relevant staff at WHO Country Offices. The contacts were jointly facilitated by the Stop-TB Department at WHO/EMRO and the WHO office in the respective country. Consent countries and programmes were visited for meetings and discussions. During meetings, the NTPs proposed and arranged meetings with officials of various public departments e.g. prison, the health insurance organization and health providers belonging to both the public and private sectors in the respective country.

Instruments and data collection

Guidelines for in-depth interviews and focus group discussions were developed in the light of the sample questions provided in the WHO-ACSM document [6]. Open-ended questions about various PPM models in the country, how this innovation was being promoted through ACSM activities, and what could be done to improve it in future, were included. The interview
and discussion guides were validated through a pilot test with officials of NTP Pakistan in Islamabad.

We conducted in-depth interviews and focus group discussions with key informants in major cities of all the 6 countries under study. All participants were interviewed to ensure attainment of maximum information. The number of focus group discussions per country was dictated by the availability of a sufficient number of participants (5–8), and feasibility within the available time. English was the main medium of communication during the discussions. Representative from the NTP acted as interpreters to facilitate 2-way communication when participants could not speak English. Manual note-taking was done at the time of interview or discussion. Participant anonymity and confidentiality was discussed before the interview/focus group discussion, and ensured at every stage.

Analysis

The analysis began on the same evening by perusing notes of the interview or discussion held that day and summarizing it in the form of a table to show the highlights of each interview or discussion. Guidance or clarification was sought from the participants for any ambiguities while the researcher was present in the country for the study. Detailed notes and transcripts were subjected to inductive analysis by reading and re-reading notes, manual coding, grouping ideas together as categories, identifying patterns within and between categories and final interpretation of emergent themes [10,11]. The findings of this stage of analysis were matched with the tables developed earlier to remove misconceptions or chances of misreporting. The findings were shared with the relevant NTP for their comments, questions and clarifications. The findings were reviewed by another expert to ensure congruence among the research questions, responses and their analysis. Improvements were made by addressing discrepancies and clarifying questions raised.

The guiding documents published by the WHO, including guidance on PPM [3], and the guidebooks on community involvement in TB care and ACSM [5,6] were perused. Relevant documents available from the countries under study were also reviewed. These included draft PPM guidelines from Afghanistan and, the ACSM strategy document from Egypt and the PPM guidelines and ACSM strategy document from Pakistan [12,13]. This part of the exercise focused on knowing whether these guiding documents provided some direction on ACSM specific to PPM. The latest relevant data from WHO reports were used to compile a TB-PPM profile of participant countries for this paper.

This study was commissioned by WHO EMRO and conducted by a Regional consultant with experience on implementation and evaluation of health communication campaigns. The study was carried out from 2 March 2009 to 24 June 2009.

Results

All 6 invited countries agreed to participate in the study; these were Afghanistan, Egypt, the Islamic Republic of Iran, Pakistan, Tunisia and Yemen. Background data from participant countries is presented in Table 1. The countries had a range of population size (10 million in Tunisia to 181 million in Pakistan) coupled with high incidence of TB and a relatively greater contribution to healthcare by the private sector.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Pakistan</th>
<th>Egypt</th>
<th>Islamic Republic of Iran</th>
<th>Afghanistan</th>
<th>Yemen</th>
<th>Tunisia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>181</td>
<td>83</td>
<td>74</td>
<td>28</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>36</td>
<td>43</td>
<td>68</td>
<td>24</td>
<td>31</td>
<td>67</td>
</tr>
<tr>
<td>Private expenditure on health (% of total health expenditure)</td>
<td>70.0</td>
<td>61.9</td>
<td>53.2</td>
<td>76.4</td>
<td>60.4</td>
<td>49.5</td>
</tr>
<tr>
<td>Incidence of TB (all forms)</td>
<td>231</td>
<td>19</td>
<td>19</td>
<td>189</td>
<td>54</td>
<td>24</td>
</tr>
<tr>
<td>Case detection rate (all forms)</td>
<td>76</td>
<td>63</td>
<td>73</td>
<td>49</td>
<td>67</td>
<td>86</td>
</tr>
<tr>
<td>Treatment success (%)</td>
<td>90</td>
<td>89</td>
<td>83</td>
<td>88</td>
<td>85</td>
<td>86</td>
</tr>
<tr>
<td>Notification rate</td>
<td>175</td>
<td>12</td>
<td>14</td>
<td>93</td>
<td>36</td>
<td>21</td>
</tr>
<tr>
<td>TB mortality rate (per 100 000 population)</td>
<td>33.0</td>
<td>1.1</td>
<td>2.4</td>
<td>370</td>
<td>8.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Average delay in diagnosis (days)</td>
<td>101</td>
<td>57</td>
<td>127</td>
<td>NA</td>
<td>59</td>
<td>NA</td>
</tr>
</tbody>
</table>

*World Health Statistics 2010 (WHO).
*Global Tuberculosis Control 2010 (WHO).
*Diagnostic and Treatment Delay in Tuberculosis 2006 (WHO-EMRO).
*TB = tuberculosis.

NA = not available.
We carried out in-depth interviews with 27 key informants in 8 major cities of the 6 countries under study. We also conducted 6 focus group discussions with a total of 36 participants (range 5–10) in 5 countries under study: no focus group discussion could be arranged in Afghanistan because of time constraints. Eleven respondents in the 27 in-depth interviews and 10 participants in the focus group discussions were female. The participants dealt with policy and implementation issues of TB care and came from various tiers, including the national (central or federal), intermediate (provincial, directorate or university) and local (district or sub-district) administrative or implementation level.

The various PPM models being practiced in each country and issues related to ACSM within each model were discussed. A summary of these models and ACSM performance within each model is provided in Table 2. In most of the countries the NTP was carrying out training of health professionals on TB care and providing TB drugs free of cost to the partners. Sporadic ACSM activities that mostly comprised distributing information, education, communication materials were being carried out. A notable social mobilization activity specific to PPM was the free chest camps by an NGO under the social franchising model in Pakistan. These were camps where the patients could get basic diagnostic and treatment services free of charge for 1 day at the clinic of a private provider; they publicized the private provider’s involvement, and promoted TB-DOTS services in the area.

The issues and challenges faced by the programmes and possible solutions to these challenges in implementing ACSM specific to PPM emerged from the discussions are described here.

**Elementary stage**

Participants described both ACSM and PPM as relatively newer areas for them in TB care. The programmes were in the phase of understanding both concepts and implementing the initial steps. Some countries were still developing the broader strategy or guidelines for ACSM/PPM. Therefore the interlinkages that could be developed were yet to be fully comprehended. According to NTP officials from Afghanistan, “Our department of new initiatives is resource- and capacity-constrained. We are in the phase of developing the broader ACSM framework, which has taken a lot of time. Once the broad framework is available, only then we can think of specific activities to promote PPM.” In countries like Pakistan, where the for-profit PPM partners were especially promoted to some extent, the task was being done independently by the NGOs responsible for provision of curative services as well. In Yemen, the ACSM was mainly confined to advocacy meetings with departments and private providers. The participants also stated that minimal guidance was available on using various communication channels to promote PPM, and countries were dealing with this aspect in a piecemeal fashion.

**Perceived difficulties**

The participants felt that engaging and promoting private providers was difficult because the “disease of poor” did not seem to offer profits. The programmes thought that selling TB (the disease of the poor) was difficult, and innovative thinking was required to develop logical arguments to market TB to private providers as a disease that can bring profits. How to sell the idea to private providers and promote their services was a challenge. The NTP officials from Afghanistan, Egypt and Pakistan shared the additional difficulty that many health providers in their country fell in ‘grey areas’ because they served as public sector providers in the morning and private providers in the evening. According to the NTPs in Egypt and Pakistan “The difficulty is that the private practice of a doctor serving in the public sector is not officially acknowledged. Promoting them as private providers becomes a little difficult for a public sector programme.”

Another difficult area was ensuring effective counselling by the busy private provider. Effective counselling by providers is seen as the most powerful tool in identifying suspects, convincing them on sputum microscopy and ensuring compliance of treatment. Yet according to participants, the busy private providers did not impart counselling because

<table>
<thead>
<tr>
<th>Mix</th>
<th>Partners</th>
<th>ACSM status</th>
</tr>
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<tbody>
<tr>
<td>Public–public</td>
<td>NTP with department of prisons, police, military, etc.</td>
<td>Sporadic production and usage of PPM-specific information, education, communication materials</td>
</tr>
<tr>
<td>Public–semi public</td>
<td>NTP with insurance and parastatal organizations</td>
<td>ACSM limited to distribution of materials, no emphasis on ACSM specific to the partnership</td>
</tr>
<tr>
<td>Public–private (non-profit)</td>
<td>NTP with NGOs managing DOTS</td>
<td>Partner NGOs carrying out independent ACSM activities according to their understanding and capacity</td>
</tr>
<tr>
<td>Public–private (for profit)</td>
<td>NTP with private providers, directly, or through NGO</td>
<td>Local level ACSM only where the private provider is engaged by the NGO</td>
</tr>
</tbody>
</table>

**Table 2 Status of public–private mix (PPM) and advocacy, communication and social mobilization (ACSM) in 6 countries of Eastern Mediterranean Region**

NTP = National TB programme; DOTS = directly observed treatment, short-course; NGO = nongovernmental organization.
of time constraints and there seemed no way to work around this constraint.

Policy issues
Participants mentioned the lack of policy direction on whether and how to use mass media for ACSM specific to PPM. Programmes had been using mass media for the promotion of public sector services in the past and felt apprehensive while making commitments on behalf of the partners, especially the for-profit private sector. Representatives of NTP and partner organizations in Pakistan stated, “The private sector is not regulated and includes unqualified, unregistered practitioners commonly called quacks. En-bloc promotion of such a sector can be misconstrued as promotion of the illegal practitioners as well.” The participants also shared that there were larger policy issues in play. The PPM partnerships were yet to integrate within the larger system, i.e. at inter-ministerial level or sometimes within various programmes under the ministry of health. According to NTP Pakistan, “Lady Health Workers of (another) national programme can be effective in promoting PPM in rural areas, but a decision to engage them to promote private providers (where required) needs deliberation and direction from the health ministry.”

National TB Programme capacity and additional issues
Lack of human resources and relevant capacity for both PPM and ACSM were reported throughout the Region. Pakistan had a team while Egypt and Afghanistan had 1 person at central level for ACSM. The rest of the countries relied on delegating ACSM to officials primarily responsible for other programme activities. Some countries were yet to produce strategy documents and action plans for PPM and ACSM. Among those who had developed some, Pakistan had finalized both documents while Afghanistan and Egypt had produced the draft versions of these strategy documents. Additionally, a variation was found across countries in the felt need for ACSM specific to PPM. Countries having a significant private sector role (Afghanistan, Pakistan and Yemen) felt a stronger need for campaigns that could help promote PPM partners, especially the for-profit private providers.

Addressing the challenges
The participants felt a strong need for developing a clear road map on ACSM in the area of PPM-DOTS. The sentiment was profound in countries where involvement of the private sector in the overall health care was considerably greater as compared to the other countries. These countries expressed the need for more assistance in terms of guidelines and training on the complementarities of these 2 important components of TB-DOTS. The participants also shared their views on how the issues and challenges facing this important component could be addressed in accordance with the local context (Table 3). The ideas included developing a clear thinking and action plan; the strategic use of mass media and on-the-ground communication; involving journalists to alleviate public apprehensions about the costs of obtaining treatment from the private sector; effective social mobilization events like holding free medical camps at private providers’ clinics; and giving more representation to all PPM partners in events like World TB Day.

Discussion
To our knowledge, this is the first study that looked into the interlinkages between PPM and ACSM, 2 important components of the new Stop-TB strategy. PPM is an innovative approach that can play a significant role in countries where a large segment of the population seeks health care from the private sector. Our study has highlighted the need for developing a comprehensive ACSM strategy specific to PPM, and provided direction on how PPM could be promoted and strengthened through strategic advocacy and communication.

Global TB control is facing many practical challenges, including weak health systems and services, deficient human resources and demand for increasing access to quality care [2]. Maximum efforts are required to meet these challenges and approaches like PPM can help achieve the global TB control targets [14,15]. In this context, the health care provided by the private sector has special significance in resource-poor countries because much of the population in these countries seeks health care from individual or institutional private health care providers [8]. Yet it is also true that the management practices of these private providers are often not satisfactory [8,16]. Formal involvement and better communication skills of private providers can improve uneven TB management and advance people’s access to quality TB care [8,17]. ACSM can help in effective involvement of these private providers, and ensure mutual benefits.

Effective advocacy to involve private providers in TB care and delivery of client-centred health education messages has been successfully implemented in small-scale projects [9] and can be scaled up by the larger programmes. Promoting the engagement of all partners, especially the for-profit, however, is a bold step and embedded within it are some contentious issues. Advertising the for-profit private sector through the mass media, asking community health workers from the public sector to refer cases to private providers, making choices of partnering between regulated or unregulated, and formal or informal private providers as partners, and making decisions on how to promote them are a few examples. Country programmes shared their thoughts on
how to address these issues. There is a need for policy directions and guidelines from ministries of health and the WHO on this particular aspect of the Stop-TB strategy.

Lack of capacity to develop, implement and evaluate action plans on strategic communication was omnipresent in this study. More important was the lack of leadership skills to deal with the contentious issues inherent in all kinds of partnerships. The public sector has traditionally worked on a track separate from the private sector—many times in a supervisory or regulatory

| Table 3 Suggestions to address challenges faced by advocacy, communication and social mobilization (ACSM) specific to public–private mix (PPM) |
|----------------|---------------------------------------------------------------|
| **Suggestion** | **Explanation**                                               |
| **Improve planning** | Technical assistance agencies should help develop ACSM guidelines specific to PPM. Country programmes should crystallize their thinking on dos and don’ts of ACSM for PPM and disseminate it. |
| Communication plan to promote PPM and enhance private provider’s interest | A well-thought, PPM-specific communication plan catering to local context should be developed by involving stakeholders, especially the private providers. It should: • have clear communication objectives e.g. raising awareness among people about availability of DOTS at local general practitioners clinic; • outline appropriate channels to be used for promoting PPM; • allocate the roles and responsibilities; • complement the broad ACSM. |
| **Market TB to private providers** | |
| One-on-one sensitization meetings with private providers | The meeting should highlight what each partner could bring to the table: • PPs: provide service to poor TB patients and help NTP achieve its targets; • NTP: enhance number of overall patients for the private provider and promote services provided at his/her clinic. |
| Free health/chest camps at/around the PP’s facility as part of social mobilization | NTP through SM partners can hold free health/chest camps at PP’s facility. The event publicized at the local level can increase number of patients for the PP, while NTP captures more suspects in the area |
| **Focus on local-level advocacy** | |
| Seminars for local level advocacy and social mobilization | In the initial phase the seminar should introduce the team to make the area TB free. Teams include health department officials, NTP, the private sector and the citizenry. Later, the events should celebrate the progress, and honour the partners, especially leadership and the private providers with some rewards. |
| Involving private sector in world TB day activities | The day is celebrated with enthusiasm but PPs are usually ignored. They should be on board during the planning as well as execution of activities of the day. |
| **Use a media-mix** | |
| Suggestions for using the mass media | The message should not promote public facility but “health facility”. Some media products (e.g. television drama, television or radio spot, newspaper advertisement) should present DOTS being administered at private clinics. Discourse on TB (e.g. talk shows) should engage PPs and present them as part of the team. |
| Effective client provider interaction | Picking up suspects, convincing them about sputum testing and ensuring treatment compliance are the main pillars of TB care, all needing effective interaction by the provider. This requires a comprehensive training and monitoring system that enables the busy PP to effectively communicate in a short time and involving paramedics when the PP is busy and cannot give adequate time and emphasis to counselling. |
| Involving CHWs | Where available, the CHW should educate the household and community on TB. The CHWs employed by the public sector may be allowed to refer suspects to a PP in case the public facility is not available/accessible. |
| **Build relevant capacity** | |
| Capacity of NTP | There should be conceptual clarity on PPM and specific ACSM initiatives. PPM and ACSM trainings should be organized for relevant staff. |
| Operations research | Process of development, implementation and evaluation along with its findings should be documented. Countries at relatively advanced levels of ACSM implementation should share their lessons for the benefit of other countries. |

DOTS = directly observed treatment, short-course; PP = private provider; TB = tuberculosis; NTP = National TB Programme; SM = social mobilization; CHW = community health worker.
role. Dealing with the same private providers as partners and accepting that they could also add value needs leadership, advocacy and communication resources that were found to be deficient. Similar programme challenges like lack of human resources, frequent transfers and apathy at the lower level of DOTS implementation have been reported in the past [18,19]. Building the ACSM capacity of the programmes is important as ACSM provides the opportunity to public and private partners to open up, overcome the barriers and work in a closely knit environment where all the stakeholders can achieve their targets.

Our study was constrained by frequent travels within short periods of time, language issues, small number of interviews with private providers and lack of contact with patients. We did not look into the impact of specific ACSM activities on PPM and their outputs as this was not within the scope of this study.

These limitations notwithstanding, the study highlights an important issue in the current TB control efforts and suggests ways to address these issues. More research on the topic can further illuminate this area. More importantly, development of clear policy guidelines and improved capacity can help PPM in making significant contribution to TB-control efforts during the next decade.

**Conflict of interest**

None declared.

### References


