Tuberculosis Prevention and Care Initiative in Karnataka

Authors: Gururaj H a; Avijit A a; Washington R a; George O b

aKarnataka Health Promotion Trust; bAbt Associates Inc.

Strengthening Health Outcomes through the Private Sector in Karnataka

The Strengthening Health Outcomes through the Private Sector (SHOPS) project is USAID’s flagship initiative in private sector health. SHOPS works to involve non-governmental organizations and for-profit entities to address the many health needs of people in developing countries.

SHOPS focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV/AIDS, tuberculosis and other areas through the private sector.

Abt Associates Inc. leads the SHOPS-TB prevention and care initiative in Karnataka. Karnataka Health Promotion Trust (KHPT) is the implementing agency in Karnataka.

Abt Associates Inc. is a mission-driven, global leader in research and program implementation in the fields of health, social and environmental policy, and international development. Known for its rigorous approach to solving complex challenges, Abt Associates was ranked as one of the top 25 global research firms in 2010. In India, Abt is currently working to improve access to public health products and services to reduce indoor air pollution, prevent and manage diarrhoea, control population growth and in tuberculosis prevention and care.

KHPT, with a vision to empower marginalised communities to improve their health and reduce the incidence of disease, implements various health programs in Karnataka, Maharashtra, Rajasthan and coastal Andhra Pradesh. The hallmarks of KHPT are evidence-based programming, rapid scale up, working in close collaboration with the government at national, state, and district levels and community engagement. KHPT has directly implemented and provided technical assistance for HIV prevention, care, support and treatment, TB care and control, and maternal, neonatal and child health.

Engagement of the Private Sector in TB Prevention and Care

India, with 26 percent of the global incidence of TB, has the heaviest burden of the disease1. An estimated 2 million new TB cases and about 280,000 TB deaths occur annually in India. The public and private health care sectors co-exist in most urban areas, but vary in the coverage they provide. In spite of the availability of public sector health services, majority of urban poor visit the private sector for minor ailments, at least in the first instance. In Karnataka, private practitioners, both qualified and less than fully qualified, play a major role in health care delivery and most people with symptoms of TB, seek treatment in the private sector2. The private sector accounts for 60 to 80 percent of outpatient healthcare in India, but only 6 percent of total patients referred for TB diagnosis and treatment are from this sector3.

The low number of referrals to the national TB control program suggests that a significant number of patients are receiving TB treatment in the private sector. Evidence suggests that treatment outcomes are poor when healthcare providers do not comply with standards of TB care and when treatment supervision is inadequate. Additionally, delay in diagnosis and/or initiation of treatment remains a huge challenge. Non-compliance to standards of TB care and delay in diagnosis and initiation of appropriate treatment contributes to increased TB morbidity, higher numbers of deaths due to TB and a high risk of drug resistance to primary treatment regimens.

1 World Health Organization, Global Tuberculosis Report 2012
2 MBPH-TB consumer baseline survey; 2011
There is a need for coordinated response from all types and sectors of healthcare providers to reduce the risks of delayed or inappropriate TB management. The SHOPS public private interface agency (PPIA) model is a patient-centred public health approach which bridges the public and private sectors as well as community, for effective management of TB.

**Market-based Partnership for Health (MBPH) TB Control and Care Initiative**

Funded by USAID| India, the Market-based Partnerships for Health (MBPH) TB initiative was successfully implemented in 2011-12, by Abt Associates through Population Services International and KHPT in Karnataka. The primary objective of the project was to engage with a pool of private sector providers including practitioners of modern medicine, practitioners of Indian systems of medicine and homeopathy, less-than-fully-qualified health practitioners and chemists to adopt national TB diagnosis and treatment policies and protocols. High intensity community outreach complemented engagement of private healthcare providers and mobilized about 800,000 urban slum populations to access TB services and adhere to treatment.

The MBPH-TB initiative resulted in improved health-seeking behaviour among target populations. The proportion of chest symptomatics visiting any provider increased from 56 percent at base line to 88 percent at the end of the project\(^1\) (Figure 3). Reported compliance with the Revised National TB Control Program by practitioners of modern medicine and less-than-fully-qualified health providers also increased significantly\(^5\). As a result of coordinated efforts of all partners (RNTCP, public health system, private practitioners, medical colleges, community leaders and the implementing agencies) trend lines for sputum microscopy done at RNTCP designated microscopy centers increased by about 85 percent (Figure 4) and case notification to RNTCP, by about 43 percent (Figure 5).

---

\(^1\) MBPH consumer end-line survey over baseline; [http://mbph.in/tb-control-and-care/tb-resources/reports/rr.html](http://mbph.in/tb-control-and-care/tb-resources/reports/rr.html)

\(^5\) MBPH provider end-line survey over baseline; [http://mbph.in/tb-control-and-care/tb-resources/reports/rr.html](http://mbph.in/tb-control-and-care/tb-resources/reports/rr.html)
MBPH Phase -2: SHOPS-TB Prevention and Care Initiative

The TB Prevention and Care model in Karnataka under SHOPS plans to adopt the successful strategies from the comprehensive MBPH model (Figure 6) and develop them further, and implement innovative new concepts aimed at establishing sustainable participation of the private sector in TB control. The model will devise strategies to overcome the challenges identified under MBPH and develop and adapt methodologies to address them.

Under the SHOPS-TB initiative, Abt Associates, through KHPT, will carry forward the MBPH project learning in Karnataka, improve or add new components that potentially provide answers to questions on viability, cost-effectiveness and replicability of private sector engagement by RNTCP. KHPT as an interface agency will work as a catalyst between the public and private sectors, the private provider and his/her patient, and between the public sector and target community (Figure 8). The key results expected from the initiative include increase in TB notification, high levels of treatment compliance among TB patients treated by private providers and decrease in private provider and health systems delays in TB diagnosis and initiation of treatment. Through this initiative, SHOPS expects to benefit 840,000 residents of 675 urban slums in 42 towns of 12 districts across Karnataka (Figure 7).

Figure 6: Comprehensive TB-PPM model with 3-way Interface

Figure 7: Scale of SHOPS-TB initiative

Figure 8: SHOPS-TB Prevention and Care Model
## Major Activities of the SHOPS-TB Initiative

### Capacity Building
- Identification and mapping of preferred healthcare providers
- Orientation of service providers likely to be engaged in TB management
- Training of clinicians, pharmacists, laboratories, assistants to clinicians and community volunteers
- Educating clinicians on TB, RNTCP and advanced topics including drug-resistant TB, TB-HIV, diabetes-TB, TB among children and TB and nutrition
- Creation of network with continued support through (a) mobile phone-based quizzes for self-learning, (b) exchange forums for cross-learning and (c) supportive visits by the PPIA staff
- Support from medical college faculty and CME for continued learning

### Communication
- Engagement of key opinion leaders from the community
- Collaboration with large and small community-based groups
- Outreach through interpersonal communication
- Thematic communication activities in the community with strategic messaging

### Care and Support
- Empowered referral of persons with TB symptoms in target communities
- Facilitate early diagnosis through sputum collection and transportation, and through pre-diagnosis counselling
- Targeted screening of vulnerable populations and of contacts of index TB patients
- Active case detection among children under five years of age with reverse tracing and screening of contacts with symptoms
- Patient and family counselling
- Support to treatment adherence through community DOT providers, treatment buddies, peer or community support groups (DOTS Prerana) and telephone helpline (DOTS Mitra)
- Facilitate linking to other support services like social support schemes, de-addiction programs, etc.

### Public-Private Interface
- Orient state and district level public and private stake holders of the SHOPS project objectives and activities
- Periodic meetings with state and district RNTCP program managers to address updates, challenges and sustainability
- Engage other public sector institutions relevant to target groups involved
- Develop local resources to act as higher treatment and care centers
- Develop capacity building resources to train and support networked private healthcare providers
- Facilitate supply of TB drugs to patients treated by private practitioners

### Key Benefits due to SHOPS TB Initiative

#### Private Sector
- Improved relationship with patients and their families
- Community recognition
- Patient retention
- Increase in knowledge about TB and its management
- Professional growth
- Fulfilment of a healthcare provider’s public health responsibilities

#### Public Sector
- Improved TB notification
- Increased penetration of RNTCP among healthcare professionals and community
- Decreased delay in TB diagnosis and initiation of treatment
- Additional resources in public health

#### Patient and Community
- Lowered morbidity, mortality and economic losses among people suffering from or affected by TB
- Access to healthcare providers of their choice
- Improved health seeking behaviour
- Higher quality healthcare services