The basic package of health services (BPHS) is a critical strategy for ensuring the decentralization of and access to health services in Afghanistan. The BPHS defines the scope of health services from the provincial and national levels to the local level, including health posts at the community level.

In 2019, there were 17,297 health posts, each of which had two voluntary community health workers (CHWs) (one male and one female). Each CHW received monthly kits of essential medicines and other supplies. The health posts provide education and information on priority health problems such as identifying and referring patients to health centers, including presumptive TB cases and other illnesses. The National TB Program (NTP), with support from USAID-funded TB projects, covered 8,273 (48%) health posts and 14,700 of the 30,594 CHWs in Afghanistan. To achieve the NTP strategy for expansion of high-quality DOTS (universal access), community-based DOTS (CB DOTS) was designed and piloted with technical and financial support from the USAID-funded Tuberculosis Control Assistance Program (TB CAP) in four provinces—Badakhshan, Baghlan, Jowzjan, and Herat—in 2009. This approach encompasses awareness raising activities, such as community events in schools, mosques, and bazaars; disseminating information, education, and communication materials; displaying billboards and broadcasting TB messages through local media to increase demand; training CHWs and community health supervisors on presumptive TB case identification, referrals, and DOTS provision; and proper recording and reporting activities to document evidence. In addition, basic health centers were upgraded with diagnostic service provisions to increase access to DOTS services to the population. Based on the success achieved in bringing TB services closer to patients, TB CAP and TB CARE 1 planned to scale up CB DOTS to nine additional provinces (Kabul, Bamyan, Takhar, Faryab, Kandahar, Ghazni, Paktika, Paktia, and Khost) where USAID supports delivery of the BPHS through the Partnership Contracts for Health. In 2015, Challenge TB (CTB) implemented the full CB DOTS package in 15 provinces. The Global Fund has implemented CB DOTS in an additional 19 provinces by training CHWs and community health supervisors. CB DOTS is also an effective referral system between clinics and community care programs to deliver home-based TB treatment in rural, hard-to-reach areas in a feasible and cost-effective way.
PROBLEM STATEMENT

Afghanistan has made remarkable improvements in health indicators since 2005. However, a wide range of barriers prevent rural communities in Afghanistan from accessing TB and other health services. TB case detection remains low in hard-to-reach areas. Populations living in rural and hard-to-reach areas are at increased risk of TB due to the presence of large numbers of internally displaced people, high levels of malnutrition, families living in overcrowded housing with little ventilation, and lack of knowledge on TB transmission and personal prevention measures. Public health facilities are also less accessible and require extensive travel time; because of this, there are delays in diagnosis and treatment of TB patients, which also contributes to disease transmission among contacts. TB case identification and infection prevention remain challenges in these areas. The Afghanistan Health Survey,1 conducted by the Ministry of Public Health (MOPH), found that 57% of the population could reach a health facility on foot within 30 minutes and 90% within two hours. Accessibility is more limited for poorer and rural residents than for wealthier and urban people. Still, 34% of active TB cases are missing, with most of those in remote and hard-to-reach areas. TB activities are not fully integrated into the BPHS. Low presumptive case identification in health facilities is due to weak coordination between communities and health facilities. Low knowledge about TB at the community level is due to weak health education sessions in health facilities, no community events, and the lack of a unique strategy for CB DOTS implementation countrywide.

STRATEGIC APPROACH

CB DOTS is an effective and efficient approach to engage the community in awareness creation, detection, and treatment of TB and brings TB services to the community. CTB designed a full package of CB DOTS activities (figure 1) to support the MOPH/NTP to expand high-quality DOTS to the community to ensure that CHWs screen community members and TB index case contacts for TB and provide directly observed treatment to TB patients. CHWs refer all presumptive patients from their screening to diagnostic health facilities for further testing. CTB supported the NTP to advocate the End TB strategy2 to leaders, politicians, community elites, and community members at all levels and fostered a link between health facilities and the community to secure their political commitment. Regular meetings with the MOPH/NTP, provincial health departments,
local politicians, and community leaders were conducted to advocate for the TB strategy in districts and villages.

Specifically, CTB supported the MOPH/NTP in the following technical areas:
- Universal access (DOT expansion)
- Training of human resources, including CHWs, on TB care and prevention
- Strengthen health systems and increase political commitment for better integration of TB services in the health care system and better planning and budget allocation
- Monitoring and evaluation
- TB infection control
- Behavior change communications

PROJECT IMPLEMENTATION

The CB DOTS full package was subcontracted (fixed price contract) and implemented by eight local BPHS implementing nongovernmental organizations in 13 provinces and by direct implementation by the NTP/CTB in two provinces in October 2015. Targets were set for each province and monitored by the NTP in collaboration with CTB.

A full description of the project’s community interventions to improve access to TB services in Afghanistan is included in an early CTB technical brief. This includes details on advocacy, communication, and social mobilization; community participation in TB care; and patients’ charter for TB care.

RESULTS AND ACHIEVEMENTS

*Increased number of presumptive TB cases referred by CHW/Community*

CB DOTS implementation data from October 2015 to September 2019 indicate a nearly three-fold increase in the number of presumptive TB cases referred by CHWs or community members (figure 2).

![Community awareness event. (Photo credit: CTB Afghanistan)](image)
Increased identification of bacteriologically confirmed TB cases in remote and hard-to-reach areas

Among those presumptive TB cases referred by CHWs or patient charters, the number of bacteriologically confirmed TB cases increased from 787 October 2015 to 3,192 in September 2019 (figure 3).

Better integration of BPHS and CB DOTS services

There has been a notable improvement in the performance of health facilities in 15 provinces in selected CB DOTS indicators. For example, the percentage of bacteriologically confirmed TB cases referred by CHWs or community members increased from 2% to 12% between October 2015 and September 2019.

Reduced loss to follow-up and improved treatment outcomes

The close treatment monitoring and support by the CHWs contributed to positive treatment outcomes that were registered by the NTP from early 2018 to September 2019 (figure 4).

Improved household investigation of TB index case contacts

From October 2015 to September 2019, 17,613 TB index cases were enrolled for treatment in health facilities, which resulted in 70,852 household contacts. Among these, 19,874 presumptive TB cases were detected and 1,512 (7.6%) were diagnosed with TB. There were 15,187 children under five years of age who were contacts of index cases, and 18,566 children without active TB were put on IPT.

*Figures 2-4—data for 2019 represent only three quarters of the year (nine months).*
LESIONS LEARNED

The experience of CTB in Afghanistan generated important lessons for future community-based efforts. CB DOTS is an effective approach for the treatment and detection of missed cases of TB in rural and hard-to-reach areas. The wide range of stakeholders—including CHWs and patient charters—contributed to local ownership that can sustain and expand achievements.

CB DOTS has gained increased recognition as an effective, efficient, and ethical means of delivering care to patients with TB. The CB DOTS referral system and feedback mechanisms operate at multiple levels of the health system, from health posts to subhealth centers and basic health centers to diagnostic centers. Provinces that offer the CB DOTS full package have achieved high detection of TB cases, surpassing the TB cases detection in provinces where the CB DOTS package is limited.

Partnering with CHWs and patient charters as links to communities has been successful in expanding the reach of information and services to people with TB, who are often spread across a region in difficult to access locations. Community events with CHWs and patient charters may be more effective than TB patient associations in TB case detection. The NTP recommends that the full CB DOTS package be expanded to all 34 provinces as a means to detect and treat TB cases and offer psychosocial support. Additionally, CB-DOTS implementation has helped CHWs recognize TB infection control measures to protect themselves and community members who are in contact with TB patients.

WAY FORWARD

CB DOTS implementation supported community members to be involved in developing local solutions to increase case notification and lead to community ownership of TB control programs. CB DOTS has been implemented in more than 715 health facilities and 15 provinces, and the Afghan MOPH is working to integrate the CB DOTS strategy into its BPHS nationwide. To achieve this, the following recommendations should be considered:

**Use a combination of individual and community outreach**
Continuous advocacy, communication, and social mobilization at the community level have resulted in increased TB case notification and improved cure rates and treatment success rates at the provincial level.

Encourage local religious leaders and Masjid Imams to talk about TB during Friday preach and assist community to protect themselves from TB infection, particularly CHWs and other health care staff in contact with sputum smear positive (SS+) TB patients. Increase the number of billboards in crowded areas and community awareness on TB and cough etiquette.

**Strengthen formal standards and processes for quality care**
Revise terms of reference for health facilities, health shura, and TB patient association. Conduct regular and joint visits, provide on-the-job training on recording and reporting systems at the health facility and health post levels, and provide written feedback to health facilities and
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Referrals to health posts. Introduce and implement TB infection control at the community level through an integrated approach, including integration of community-level infection control SOPs into general SOP training. Involve mobile health teams working in white\(^4\) areas in CB DOTS implementation.

**Build institutional capacity for sustained care**

Conduct annual refresher trainings for health facility in charges, community health supervisors, CHWs, nurses, and lab technicians. Institutionalize incentive schemes for CHWs and activate a sputum sending system from basic health centers and health subcenters to diagnostic health facilities. Integrate with other countrywide projects supporting health service delivery.

REFERENCES


2. The WHO End TB Strategy aims to end the global TB epidemic, with targets to reduce TB deaths by 95% and to cut new cases by 90% between 2015 and 2035 and to ensure that no family is burdened with catastrophic expenses due to TB. Available at: www.who.int/tb/post2015_strategy/en


4. According to the MOPH access to health services policy, white areas refer to areas where a pregnant woman is within two hours walking distance to the nearest health facility.

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