Background

The world’s youngest nation, South Sudan, is struggling on many fronts, including against tuberculosis (TB). TB/HIV co-infection is also a growing concern: in 2014, 67 percent of TB patients in South Sudan were living with HIV.

Since the outbreak of war in December 2013, more than 2.5 million South Sudanese have been displaced, out of an estimated population of 12 million. While close to a million people fled to neighbouring countries, approximately 1.6 million South Sudanese are now in “internally displaced persons” (IDP) camps and five Protection of Civilian sites (POCs) at United Nations Peacekeeping Mission bases scattered throughout the country.

While the IDP camps are mostly set in open areas around churches and schools, the POCs are fenced and heavily guarded. Their overcrowding and close quarters contribute to the risk of TB and TB/HIV co-infection, while elaborate security measures make it difficult for medical workers to enter.

South Sudan’s health system is weak overall, with TB services scant in the nation’s few functioning health facilities. Only 87 out of the country’s 1,147 health facilities (under 8 percent) currently provide TB diagnosis or treatment.

In the IDP camps, NGO health teams have set up limited clinics that focus on basic and emergency health care. The UN Mission bases, too, are ill prepared to defend against TB, and the UN mandate covers no more than basic and emergency care.
CHALLENGE TB IN SOUTH SUDAN

Management Sciences for Health (MSH) is the sole implementer of the U.S. Agency for International Development (USAID)’s Challenge TB project in South Sudan. Through Challenge TB, MSH’s work contributes to USAID’s goal of a world free of TB as part of its End TB Strategy, which seeks to reduce TB mortality by 35 percent and reduce incidence levels by 20 percent by 2019. It also looks to relieve families of the devastating burden of caring for a TB patient.

In the Mingkaman IDP camp, CTB partners with Health Link South Sudan and Arkangelo Ali Association (AAA). In the Juba POC, CTB joined humanitarian partners including International Medical Corps, which manages the POC’s only hospital.

Challenge TB

Challenge TB (CTB), a five-year project launched in 2014, is the primary mechanism for implementing USAID’s global End TB Strategy. It also contributes to the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) TB and HIV activities.

In South Sudan, Challenge TB provides direct technical support and guidance to the National Tuberculosis and Buruli Ulcer Programme (NTP) of the Ministry of Health (MOH) as well as community-based organizations. The project focuses on the former Central Equatoria, Eastern Equatoria and Western Equatoria States, which show a significantly higher burden of TB and HIV compared to other states. They are also more populated and accessible.

Strategic Approach

CTB’s strategy builds on that of the previous USAID program, TB CARE 1, which ended in December 2014. Thus it is integrating TB services into primary health care centers and training key health workers including clinicians, laboratory technicians, and volunteers from the community, called Home Health Promoters (HHPs).

War and its aftermath have limited access to many areas, however, threatening to derail some of the progress under TB CARE 1. Most humanitarian actors in South Sudan have been forced to prioritize emergency, life-saving interventions for the IDPs, instead of development-oriented programming.

Challenge TB is working with the MOH and partners to support TB control services in the Mingkaman IDP camp (population approximately 49,000) and the Juba POC (population approximately 100,000).

Expanding Community-Based DOTs

CTB provides technical support to health care workers of implementing partners in IDP camps and POCs, through onsite training, quarterly onsite mentorship, and supportive supervision performed jointly with the NTP, State TB office or County Health Department. As of mid-2016, CTB had trained 42 clinicians and nurses—16 in Mingkaman and 26 in Juba POC.
Training covered basic knowledge about TB and active case finding, including standard operating procedures to increase case detection at triage and in outpatient departments, antenatal wards, and HIV clinics. The training also covered accurate reporting and use of monitoring and evaluating tools for TB.

This onsite training also enabled staff to fill all TB monitoring and evaluation tools correctly, identify common errors, and correct them. This was particularly important for lab technicians, whose work requires a high degree of accuracy and completeness.

After the trainings, CTB staff conduct monthly and quarterly supportive supervision visits together with NTP and implementing partners. These and other follow-up visits and refresher trainings have enabled CTB to reinforce the training and identify and address gaps in both theory and practice.

CTB also coordinated the delivery of equipment, supplies, and drugs to TB laboratories in the two displaced-persons settings. The project has trained lab technicians and monitored the quality of lab services within the external quality assessment (EQA) network.

**Increasing TB Education and Contact Investigation**

Just as important has been training and supporting the volunteer Home Health Promoters, who work directly with the NGOs. In Juba POC, case finding had been strictly passive before the project began—TB was diagnosed only if individuals arrived at the hospital for treatment. CTB emphasizes active contact investigation, performed primarily by the HHPs, which has proven highly effective in other CTB settings.

In 2015, CTB provided technical support to NTP to develop and disseminate HHP manuals to guide the training of HHPs across the country. Between 2015-16, CTB trained 54 HHPs (37 men and 17 women) in Mingkaman IDP camp and Juba POC on the basics of TB, contact investigation of bacteriologically confirmed TB patients, referral for diagnosis, follow-up care to ensure treatment adherence, and health education using flip charts. CTB has also provided bicycles to help HHPs reach people otherwise unreachable by the project or MOH.

The HHP volunteers come from the same communities as other IDPs; they know local norms, and how to get things done in the camps and POCs. They know the patients and their families, and can easily go household to household, even in the POCs, educating the community and checking on patients who may miss a drug dose.

Like the clinicians, HHPs benefit from project-related supportive supervision, follow-up visits, and refresher trainings.

**Tailoring Treatment and Infection Control to the Environment**

In the POC, conditions are crowded and the health facility is one large area without walls that can isolate patients. Therefore CTB encourages partners to provide DOT not in a room nor in the health facility, but in an open field. IDPs at the camp are more scattered and have better ventilation, so infection control is somewhat less of a challenge.

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**Figure 1: TB case notification in IDP sites (October 2014-June 2016)**

Source: Challenge TB Year 2 Quarterly Monitoring Report, April-June 2016
Results

- Case detection grew from 27 cases in the last quarter of 2014 (October-December) to 106 cases the first quarter of 2016 (January – March).
- Cumulatively, health workers diagnosed 442 TB cases (226 in Mingkaman IDP camp and 216 in Juba POC) between late 2014 and mid 2016. All were enrolled on treatment.
- The treatment success rate in Mingkaman IDP camp rose from 33% in early 2016 to 60% in the third quarter (July-September) of 2016.
- The training, supervision, active contact investigation, and fast-tracking of coughers at health facilities all appeared to contribute to the dramatic increase in case detection.
- However, insecurity in both settings caused case detection to fall by about half in the second quarter of 2016 (April – June).

Lessons Learned

Full integration of TB/HIV services into general health care is key to ensuring access to TB services in South Sudan. Currently, many private and public health facilities even outside the IDP camps and POCs do not offer TB services. CTB’s continued support to health partners is important as CTB is not a service provider.

Within the IDP camps and POCs, both training and continuing joint supportive supervision of health care providers have contributed to access to and quality of TB care.

Active contact investigation for case finding is essential and needs to be continued. Since it can best be accomplished through residents trusted by the community, it is important to continue to support the work of HHPS in the IDP camps and POCs.

Adjustments to the environment, such as offering DOTS to IDPs in the open rather than in crowded or contained areas, will continue to be a priority.

Additional information can be obtained from:
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