

Welcome to the latest edition of the Challenge TB Newsletter which brings you a snapshot of Challenge TB work, with stories from Afghanistan, Bangladesh, Burma, Nigeria, South Sudan, and Tanzania.



### COVER YOUR COUGH

Burma has very high levels of TB, HIV and multidrug-resistant TB. In 2015 there were 140,700 TB cases reported, but an estimated 50,000 TB cases were not diagnosed or registered. To address this, the national TB program has been scaling-up its activities to find these missing cases.

In 2016, Challenge TB conducted a "Cover Your Cough" campaign targeting school children. During the campaign, 16 trained volunteers educated more than 20,000 school children in 20 schools across four townships in Rangoon. The education covered facts about TB, such as how it is transmitted and how to prevent TB transmission, and also included other airborne infections, and the importance of covering your mouth when you cough. The campaign also distributed handkerchiefs to the children, so they could practice covering their cough.

During the training sessions the children played a game, where cards containing an image of someone healthy and smiling, someone covering cough with sleeves or a handkerchief, or someone who didn't cover their cough, were randomly distributed. Four children with 'healthy and smiling' cards were invited to the front and each asked to call up one friend. Each pair then showed the cards they had received to the class. The children with the smiling card stopped smiling when they realized how a friend with the uncovered cough card was putting their health at risk. The idea was to demonstrate how airborne diseases can easily spread from one person to many others and the importance of covering your mouth when you cough.

TB information booklets and questionnaires were also given to the parents to increase their awareness of TB and to get them to interact in the campaign's activities. The questionnaire had questions on TB and was designed to show if children had shared their newfound TB knowledge with their parents. Ninety percent of the questionnaires were filled in and returned. The campaign was also turned into a documentary which was broadcast, and helped to bring cough etiquette and awareness of airborne infections to an even wider audience.

Following the campaign, a teacher contacted the team to say they had found three children with TB symptoms. The team sent all of them to the nearest health center where all three were diagnosed with TB and started on appropriate treatment. This highlights how information spreads and how raising community awareness can cut TB transmission and save lives.





### FINDING THE MISSING CASES

n 2014 WHO estimated the TB case detection rate in South Sudan to be only 48%, meaning that around 52% of TB cases are missed. In an effort to change this situation, Challenge TB supported and engaged health promoters in the capital, Juba.

In April 2016, 100 health promoters from four community-based organizations were trained to help bring information on TB and related services to communities in both rural and urban areas. Health promoters do contact tracing of smear positive patients in the community as well as raising communities' awareness of TB and how it is transmitted. Following the political crisis in July 2016, much of the country became inaccessible and Challenge TB intensified case finding at health facilities.

In Juba, health promoters affiliated with the AIDS Resistance Trust, conduct daily TB education and contact investigation at key public health facilities. The health education sessions are designed to equip outpatients with basic knowledge on the signs and symptoms of TB, the modes of transmission, and information on prevention and care. "With the help of the health promoters, the number of patients lost to follow-up has been reduced", said Sabina, a clinical officer at Munuki PHCC.

Between June and December 2016, 1,765 new TB cases were notified compared to 1,589 during the same period in 2015, an 11% increase that can probably be to a large extent attributed to health education and contact investigations.

Health promoter Rombe Elias believes that health education and the attention given to patients at Munuki PHCC accounts for the increasing number of TB cases being found and treated. He said: "The number of TB patients being treated is higher. Health education is attracting more people here, even patients from Juba Teaching Hospital. When they come here, the first people they meet are the health promoters".

Rombe is proud that he has been able to make a contribution to the fight against TB in South Sudan, and he calls on others to join him in the fight.

## WINNER

As a single mother of four, Blessing Ihunwo wasn't too worried when her four-year-old daughter Winner fell while playing and developed a lump on her back, it was nothing strange, just a bump. However, she did become very concerned when the swelling increased in size and became very painful. When Winner started to be unable to move her limbs properly, she decided to take Winner to a traditional healer, and when this didn't help, she sought spiritual help from her church. It was there that she was advised to seek medical help and she was given some money to go to the University of Port-Harcourt Teaching Hospital.

At the hospital, Winner was admitted to the chest clinic, where she was spotted by the Challenge TB Nigeria team who were conducting their monthly supportive-supervision visit. The Challenge TB appointed pediatrician immediately recognized the swelling as a symptom of childhood TB. Children are especially prone to spinal TB, which when not treated can lead to a collapse in the vertebrae and cause paralysis of the legs. The pediatrician's TB diagnosis was confirmed with a chest X-ray and Winner was immediately started on anti-TB treatment.

After less than two months, Winner was already showing signs of improvement, she no longer felt pain in her back and was able to walk, run and play again. The swelling had reduced in size and the scoliosis (curving of the spine) had completely disappeared.

In accordance with Challenge TB's goals, Winner's family was educated about TB and how it is transmitted. They were also counseled on how to help her adhere to and complete the 12 months of treatment. Members of Winner's family and people who have been in close contact with her have been traced and tested for TB, though none were diagnosed with TB. Thanks to Challenge TB's investments in the Nigerian healthcare system, Winner is now well on the way to recovery. After five months of treatment she is still monitored closely and receives orthopedic care alongside her TB treatment.

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### SOCIAL SUPPORT BRINGS HOPE

Up to three million Bangladeshis work in the garment industry. The factories are densely packed and ventilation is poor - textbook conditions for the spread of TB. With the support of Challenge TB, the national TB program is organizing TB clinics near clusters of clothing factories and reaching out to workers with TB education and screening programs. They are also contacting employers to explain that according to the law, no one should lose their job while being treated for TB.

Mohammed Rasel left his village to work in a Dhaka garment factory two years after his father died. At just 14, he was proud of being able to support his family, but six years later in 2014, he began to feel weak, lost his appetite, and developed a bad cough that only seemed to get worse. At first the fact that he had TB was missed, but when he didn't get better he was tested and TB was confirmed. He received six months of directly observed treatment (DOT) from the Upazilla Health Complex, after which he was pronounced cured.

But three months later the symptoms came back, and he was diagnosed with a form of TB that is resistant to first-line drugs. He spent seven months in a multi-drug resistant (MDR-TB) ward, where his treatment was free, but how would his family survive while he was not able to work?

To ease the financial burden on patients like Rasel who are unable to work whilst they are kept in hospital and therefore to make it more likely that they complete treatment, the Challenge TB project provides "social support" to TB patients. The most visible part of this support is a stipend that is sent by mobile money to the patient's phone.

Rasel faces at least 13 more months of MDR-TB treatment at home, this is provided by a community DOT provider. If a patient is receiving DOT in their community, their DOT provider also receives a small financial incentive to visit their patients every day. This way it is ensured that patients complete their treatment and are cured.

After a few months of treatment Rasel has been able to start working again he said: "It would not have been possible for me to have continued the treatment without the financial support". With the help of his DOT provider, Rasel has talked to his coworkers and explained his disease. He has assured them that they are not at risk and to their credit they understand and have all been very supportive.

### HEALTHY MIND & BODY

In October 2016, the management of "Nsumba Boys", a state run boarding school in the village of Luchelele, contacted the district TB coordinator about a student who had suffered from a persistent cough, weight loss and night sweats. He had been diagnosed with an upper respiratory tract infection at the district hospital and was prescribed antibiotics, but there was no improvement. When his condition deteriorated he had been sent home. The TB district coordinator then diagnosed him with sputum smear positive TB and he was immediately started on treatment.

Following the incident, arrangements were made to conduct contact investigation by the Regional and District TB and Leprosy Coordinators and the Challenge TB field coordinator. An inspection of the school showed that there was overcrowding in the student dormitories, with ten students sleeping in rooms designed for four, and poor ventilation as a result of small windows. Crowding and inadequate ventilation, lead to poor respiratory health in general and play an important role in the transmission of TB.

A total of 98 roommates and classmates were screened for TB, and 40 were identified as possible TB cases. They were tested with GeneXpert and a total of six were found to have TB and were started on the appropriate treatment. In September 2015, the management of a privately owned school in Pwani region had also reported a student who was diagnosed with active TB after he had been sick for some time. Contact investigations were conducted and out of the 778 students screened, 78 were symptomatic and three were confirmed to have active TB. They were immediately started on TB treatment and have all been cured. The school has since improved the ventilation in the dormitories by widening their windows and reduced the number of students sleeping in each room.

At the school in Mwanza, the recommendations to widen the windows and reduce the number of students per dorm room have yet to be implemented. However, the Ministry of Education has be informed of the importance of carrying out these changes and the Challenge TB field coordinator will be making sure they happen.

The TB and Leprosy Coordinator is planning to follow-up with other students at the school and to extend screening to more schools. After the CTB intervention in Pwani, the National TB and Leprosy Program has instructed regional authorities to collaborate with the school health program and carry out TB screenings in all boarding schools.

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# THE POWER OF ONE

**AFGHANISTAN** 

A fghanistan has very high rates of TB, particularly in the densely populated capital Kabul. The country is also dealing with considerable challenges in providing effective TB care and prevention, because of poor security and a lack of infrastructure. Despite these challenges, urban DOTS is now provided in 85 facilities across the city, up from a starting point of 22 health facilities in 2009.

One of these is the 100-bed Barchi Hospital in the crowded sub-district of Nahia. Before urban DOTS was introduced, this hospital had shown little progress in finding, diagnosing, treating or reporting on TB, today it is a very different story.

Although it takes skilled teams, drugs, equipment, and a functioning health care system to make TB care work properly, certain individuals stand out, reminding us that one dedicated person really can make a difference.

Hayatullah Mirzayei is just such a person. He has been working as a DOTS nurse at Barchi Hospital since 2013, when he was trained on the standard procedures for finding cases, diagnosis and treatment. Today, Mirzayei manages the treatment of more than 90 TB patients each day and diagnoses 70-80 new TB patients each quarter.

Mirzayei scours the streets of Kabul in search of the contacts of TB patients and screens them for TB, and he also gets children under the age of five on preventive therapy. The trust he has built among patients and their families has led to a dramatic improvement in adherence to treatment.

Health officers say that Mirzayei's efforts have played a major role in seeing Barchi Hospital's treatment success rates jump from 78 percent in 2013 to more than 90 percent today.

Ever modest, Mirzayei says, "I feel very happy when a TB patient is successfully treated. I am thankful to Challenge TB for providing me with the knowledge to identify, diagnose and treat TB patients effectively."

# WEBSITE

![](_page_7_Picture_1.jpeg)

#### **New Publications:**

#### Desk Guide for the Management and Treatment of Childhood TB

This guide is for health workers who manage sick children in first level health facilities or outpatient settings at any level of care. It aims to improve early and accurate case detection of children with TB, the management and outcome of children with TB, and child contact screening and management.

#### Generic programmatic and clinical guide for the introduction of new drugs and shorter regimens for the treatment of Multi/Extensively Drug-Resistant TB

This document describes the steps necessary to implement shorter regimens and new drugs for drug-resistant TB treatment. It includes diagnosis and bacterial confirmation of drug resistance, treatment regimen design, monitoring of treatment efficacy and safety, and programmatic evaluation.

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#### What is Challenge TB?

Challenge TB is the flagship global mechanism for implementing USAID's TB strategy as well as contributing to TB/HIV activities under the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).

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Challenge TB is led by KNCV Tuberculosis Foundation and implemented by a unique coalition of nine organizations: American Thoracic Society (ATS), FHI 360, International Union Against Tuberculosis and Lung Disease (The Union), Interactive Research & Development (IRD), Japan Anti-Tuberculosis Association (JATA), Management Sciences for Health (MSH), PATH and the World Health Organization (WHO).

### Challenge TB contributes to the WHO End TB Strategy targets:

Vision: A world free of TB Goal: To end the global TB epidemic By 2025: A 75% reduction in TB deaths (compared with 2015) and less than 50 cases per 100,000 population.

#### Global Fund:

Challenge TB assists countries with the full Global Fund life cycle, from epi-analysis and national strategic plans to concept notes and full implementation.

#### Overarching:

Challenge TB is a cost-effective and efficient mechanism with a particular emphasis on reaching out to vulnerable communities. It assists countries to move towards universal access through a patientcentered approach that identifies and addresses the needs of all patients including women and children.

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