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HEAL TB

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SAVING LIVES, IMPROVING HEALTH

OUR INSPIRATION

TAO OF LEADERSHIP

Since our founding in 1971, MSH's operational philosophy has been the 3,500 year old Tao (Way) of Leadership, working shoulder-to-shoulder with our local colleagues and partners and empowering them for success.

Go to the people
Live with them
Love them
Learn from them
Start with what they have
Build on what they know

But of the best leaders
When their task is
accomplished
The work is done
The people will say
We have done it ourselves.

-Lao Tzu

Prepared and designed by Berhan Teklehaimanot

Photo Credit : Berhan Teklehaimanot and Warren Zelman

This collection of stories represents some of the lifesaving work that USAID, Ethiopia's Federal Ministry of Health, and the HEAL TB team performed every day, 2011-16, and which continues under the leadership of the FMOH.

HEAL TB

While TB is a national and international priority, Ethiopia's high TB rates were not declining rapidly in the 2000s.

From 2011-16, USAID funded a project to support the Federal Ministry of Health (FMOH) to dramatically improve TB services and outcomes in Oromia and Amhara Regions. Its formal name is "Help Ethiopia Address Low TB Performance," or HEAL-TB.

HEAL TB assisted FMOH to find and treat TB cases among children, adults, and special populations; expand multidrug-resistant TB (MDR-TB) diagnosis and treatment; integrate TB and HIV services; improve laboratory diagnostics and reporting; and strengthen health-system expertise, leadership and management.

The project scaled up to make these services accessible to nearly 55 million people--more than half the country's population. It upgraded comprehensive TB facilities at all 2,200 health facilities in Oromia and Amhara Regions.

Thanks to intense capacity-building and mentorship, the expertise and health-systems improvements now reside in Ethiopia's public health system, so that FMOH can continue progress against TB throughout the country.

A MOTHER'S WISH FULFILLED: ROLLING OUT TB CONTACT INVESTIGATION IN RURAL OROMIA, ETHIOPIA

Berhan Teklehaimanot
Ali Galgalo Jillo

Aster Gemede and her daughter, Lemlem, at a TB clinic in Borena.

Aster Gemede lost her husband to tuberculosis (TB) meningitis early in 2012. Struck with grief, Gemede did not notice her own deteriorating health in the months after his death. Cough, fever, chest pain, and loss of appetite became part of her everyday life. She hardly noticed she was losing weight. When Gemede got to the point where she was unable to look after her two children, she was forced to walk eight hours from her home in rural Borena zone, Oromia, Ethiopia, to the nearest health facility.

That facility could not diagnose Gemede, so they referred her to Dilla district referral hospital, where she was diagnosed with TB. Immediately, Gemede was linked to the Guangua health center, where she was put on TB treatment in December 2013.

"Knowing the cause of my husband's death, I was really frustrated and was really depressed thinking about my kids' future. Why is God punishing us like this? Am I going to die like my husband?" Gemede remembered thinking while waiting for counseling at the health center. "I was crying; and I was disappointed in life itself."

Sister Alemtsehay, the Guangua facility's TB focal person, remembers the day Gemede came to her for counseling. "Aster was really depressed and she imagined that she would not survive this 'curse' that killed her husband. However, through counseling, I was able to convince Aster to change her attitude."

Alemtsehay is one of the health care providers trained by the US Agency for International Development (USAID)-funded Help Ethiopia Address Low TB Performance (HEAL TB) project, led by Management Sciences for Health (MSH), to screen, treat, and counsel clients. "From the trainings and mentorship we received from HEAL TB, we are aware that when a symptomatic patient is in a house, children are at higher risk of contracting diseases," said Alemtsehay. She tested all of Gemede's family members for TB. Gemede's daughter, 18-month-old Lemlem, was also diagnosed with TB and began receiving treatment and nutritional supplements immediately.

HEAL TB has improved health workers' ability to identify and treat TB patients and has been a change engine in tracing TB contacts in the Oromia and Amhara regions since the project's launch in 2011.

Both Gemede and Lemlem, after six months of treatment, are cured. Gemede said:

This is a mother's wish, to see your child get better. I thank the health worker for making sure we are looked after. My family and I are forever grateful.

TB SCREENING AT HEALTH FACILITIES REDUCES MISSED OPPORTUNITY FOR EARLY DETECTION OF TB FOR RURAL POPULATIONS

Berhan Teklehaimanot
Dr. Henock Bekele

Episodes of watery diarrhea and vomiting for three successive days led **Worknesh Tefera**, 40, a mother of four from rural village to seek care and treatment at the Deneba health center, Amhara Region. Noting her coughing, the health officer, Asefa Ketema, asked questions that made him realize that she had a productive cough with night sweating for more than a month. In rural Ethiopia, chronic coughs are not often seen as needing immediate treatment.

The Deneba health center is one of the health facilities supported by the USAID TB implementing mechanism, Help Ethiopia Address the Low TB Performance (HEAL TB), led by Management Sciences for Health (MSH). HEAL TB is guiding and supporting health workers at more than 1,655 health facilities in Amhara and Oromia regions to screen all patients and clients coming with symptoms of Tuberculosis (TB) irrespective of their presenting symptoms. The main aim of initiating TB screening at the health facilities is to avoid missed opportunities in identifying TB in patients with chronic TB related symptoms but do not express their complaints passively.

Asefa considered Workenesh's cough a possible case of TB and requested a laboratory testing for TB bacteria. Based on the results, she was diagnosed with smear-positive pulmonary TB and acute food poisoning. Asefa prescribed medications for the food poisoning and immediately linked Worknesh with the health center's TB clinic head, Fikadu Tekle, to initiate TB treatment.

Fikadu also educated Worknesh and her husband on TB treatment, TB infection prevention and, in addition, did a family contact screening on her husband and four children. The family members were free of TB symptom. To prevent active TB infection, Fikadu put the three-year-old on isoniazid prophylactic treatment (IPT).

Six weeks into Worknesh's treatment, her six-year-old daughter developed productive coughs and loss of appetite for more than two weeks. This was noted by the village's community health extension worker (HEW) and the girl was brought to the health center TB clinic. The six-year-old was investigated for TB using GeneXpert, a new TB diagnostic tool being implemented in the region through HEAL-TB/USAID support. The result was negative and she was put on antibiotics and a close follow-up. After two months of directly observed therapy, Worknesh's follow-up sputum test was negative. "I am grateful for the care my family and I received. The clinician identified the symptoms and treated me, and now my family is safe." said Worknesh.

A year back, there was not a TB screening activity at the Deneba Health Center. During the nine months of HEAL TB technical interventions, 96% of adult medical outpatients were screened for TB. Further linkages with the Health Extension program using supported HEWs has been a strong component of the TB screening strategy implemented by HEAL-TB.

Since the launch of the HEAL TB in 2011, health facilities supported by the project were screening 98% of the patients that came to the health facility for the diagnosis and treatment of other illnesses.

A year back, there was no TB screening activity at the Deneba Heal Center. During the nine months of HEAL TB technical interventions, 96% of adult medical outpatients were screened for TB.

MICROSCOPES AND DIAGNOSTIC TRAINING INCREASE TB CASE DETECTION IN ETHIOPIAN REGION

Berhan Teklehaimanot

When the community health worker knocked on his door, **Endiros Tadiswal** was relieved. The 19-year-old boy had been suffering from a terrible cough, chest pains, fever, and weight loss for nearly six months and had become too weak to attend school.

After examining him, the health worker referred Endiros to the Yekoso Health Center for tuberculosis (TB) testing. Unfortunately, when Endiros arrived at the health center, the staff explained that they did not have a microscope to examine patient samples for TB, and they referred Endiros to the closest diagnostic facility. Endiros was far too weak to walk the 15 km to the facility, so he returned home discouraged and afraid.

Soon after this, the PEPFAR-funded, USAID project, Help Ethiopia Address the Low TB Performance [4] (HEAL TB), led by Management Sciences for Health (MSH), began working in Endiros' community in the Amhara Region of Ethiopia. The project donated a microscope and diagnostic starter kits to the Yekoso Health Center and trained two laboratory technicians to use the microscope and conduct quality assurance exercises to ensure efficient and accurate TB diagnoses.

To further expand diagnostic capacity in the East Amhara sub-region, 25 microscopes were distributed and trained 242 laboratory technicians on microscopy skills and quality assurance monitoring

Endiros was among the first patients to be tested for TB at Yekoso Health Center and, as expected, his results came back positive. Trained by HEAL TB to conduct contact screening, the clinician asked Endiros to bring his friends and family members with TB symptoms to the facility for testing, too.

Within days, Endiros' father, **Tadiswal Abebe**, also tested positive for TB and the health center enrolled both of them in TB treatment.

Today, Endiros and his father are feeling stronger and have gained weight. Soon Endiros will be healthy enough to return to school. "The relief we feel now surpasses the suffering we have been through. We are so happy and, at the same time, grateful to have TB diagnostic services at the nearest facility," said Endiros.

In the eight months since HEAL TB's training and microscope donation, Yekoso Health Center has diagnosed 10 people with TB. To further expand diagnostic capacity in the East Amhara sub-region, HEAL TB has distributed 25 microscopes and trained 242 laboratory technicians on microscopy skills and quality assurance monitoring. Together, the project-supported facilities in East Amhara have diagnosed 32 patients with TB and enrolled them in treatment.

TRAINING AND MENTORING IMPROVES TUBERCULOSIS DETECTION IN RURAL ETHIOPIA

When Dagmawi Shiferaw's poor health failed to improve after visiting the clinic near his home, he traveled more than 100 km to the capital, Addis Ababa, seeking care. Health workers there diagnosed the 27-year-old farmer with tuberculosis (TB) and told him to begin treatment at his local clinic. Three days after starting medication, Shiferaw died.

Late diagnosis is not unusual in rural Ethiopia and other developing countries because of poor TB screening practices and limited testing ability, especially at rural clinics. And the longer a person remains untreated, the greater the risk of passing the disease on to others. TB is a leading cause of death in Ethiopia, as it is in many other sub-Saharan African countries that have a high burden of HIV.

To help improve Ethiopia's response to TB, the US Agency for International Development (USAID)-funded Help Ethiopia Address Low TB Performance (HEAL TB) project trains and mentors health workers in the Amhara and Oromia regions. Led by Management Sciences for Health (MSH), the five-year project supports the Government of Ethiopia's prevention and control efforts related to TB, multidrug-resistant TB (MDR-TB), and HIV.

HEAL TB trains health workers on screening for TB, tracing the contacts of TB patients, and following up to make sure those who are infected are adhering to treatment. Failure to consistently take medication can lead to MDR-TB. The district health officers visit health facilities each quarter for refresher training and mentoring and to check log books on contact tracing and treatment.

Now I know a lot about TB. I will teach my community for the rest of my life.

Shiferaw lived with 12 family members in a small *tukul*, or hut, with a single door and no windows for ventilation. TB spreads more easily in closed quarters and so his entire family was at risk. Health workers screened all of them and confirmed that Shiferaw's wife, Adanu, and her two brothers, Fekadu, 15, and Alemu, 17, had TB. Because of their illness, Adanu couldn't work and the teens were forced to miss school.

Health workers periodically follow up with the rest of the family, including Shiferaw's three-year-old son. He was put on isoniazid preventive therapy, which helps prevent TB from becoming active.

"My family was in great sorrow after the death of my husband," said Adanu. "We were the next victims if the health workers had not traced and saved us. Now I know a lot about TB. I will teach my community for the rest of my life."

Since starting treatment, Adanu has regained weight she lost and is strong enough to work. Alemu is healthy and is continuing his education, while Fekadu is also in good health and will soon resume school.

The experience of Shiferaw's family shows that training district health office staff in contact tracing, screening, and mentoring can help to reduce the burden of TB in rural Ethiopia.

"I hardly did mentoring before the training was given by HEAL TB. Now I regularly monitor the routine practice of evaluating any person with a cough of two weeks or more for TB," said Korsa Tessema, Jidda District TB prevention and control officer. "I also support health workers in tracing household contacts of TB patients. The frequent support and guidance that I get from HEAL TB helped me do this."

NEW TOOL REDUCES TB DRUG STOCK-OUTS IN ETHIOPIA

Mulu Legesse
Berhan Teklehaimanot

For over a decade, the Government of Ethiopia has been working to improve tuberculosis (TB) screening and has been greatly successful in increasing case detection. Unfortunately, as is too often the case, solving one problem created another: the nation now struggles to maintain an adequate supply of medicine to treat the newly diagnosed patients. Health facilities experience frequent stock-outs of anti-TB medications, leaving many patients without treatment for weeks and even months. This service gap not only exacerbates many patients' illness, but also contributes to TB transmission and development of drug-resistant TB strains.

In 2011, to address this challenge, the US President's Emergency Plan for AIDS Relief (PEPFAR) - and US Agency for International Development (USAID)-funded Help Ethiopia Address the Low TB Performance (HEAL TB) project began supporting the National TB Program in implementing an integrated pharmaceutical logistics system (IPLS) in Ethiopia. IPLS is a streamlined system that improves drug supply management by integrating drug requisition, distribution, and reporting information into a single mechanism. In addition to reduced paperwork, improved reporting consistency, and a simplified drug supply management system, IPLS includes a forced order delivery system that allows Ethiopia's Pharmaceuticals Fund and Supply Agency (PFSA) to distribute drug supply quantities, based on health facilities' monthly reports.

This feature allows health facilities to maintain drug supplies between a minimum and maximum level to avoid drug expiration and stock-outs and ensures that all patients receive full treatment regimes.

Led by Management Sciences for Health (MSH), HEAL TB started supporting the implementation of IPLS in the 10 zones of Amhara and Oromia Regions where 22 percent of health facilities had recorded anti-TB drug stock-outs in 2011. In collaboration with the Amhara and Oromia Regional Health Bureaus and the PSFA, HEAL TB has:

- trained 691 facility staff on IPLS operations;
- provided IPLS recording and reporting tools,
- distributed 355 lockable drug cabinets;
- conducted quarterly supportive supervision visits to ensure staff are accurately implementing IPLS; and
- held regular regional review meetings for implementers to share best practices and lessons learned.

At the end of an 18-month implementation period, the anti-TB drug stock-out rate at the 691 facilities had declined to 0.2 percent (see figure 1). The Government of Ethiopia has been committed to scaling up the intervention to further improve TB and HIV drug supply management, and in turn, increase patient cure rates and reduce disease transmission.

Figure 1. Improved Drug Supplies and Management after IPLS Implementation (Amarah and Oromia zones, Ethiopia)

Indicator Baseline	Oct.-Dec. 2011	End line April-June, 2013
Stock-out adult anti-TB medications	22%	0.2%
Up-to-date stock cards	25%	74%
Use of drug requisition and reporting forms	11%	75%

HEALTH EXTENSION WORKERS BRING PERSONAL CONNECTION TO TB CASE DETECTION AND TREATMENT

Berhan Teklehaimanot/ Wegayehu Getachew

Despite the availability of highly efficacious treatment for decades, tuberculosis (TB) remains a major global public health problem today. Identifying individuals with TB and getting them treatment rapidly are key to controlling TB. However, many patients struggle to adhere to treatment guidelines and too often patients are lost to follow-up. This is often due to issues around access to transportation, cost, lack of social support, and poor communication between patients and health care workers.

To address this issue, Ethiopia launched the health extension program at a national level, whereby female health extension workers (HEWs) are trained to provide basic preventive services, including detection and referral of anyone suspected of TB in all rural villages. Taking this existing system into consideration, the United States Agency for International Development (USAID) funded project, Help Ethiopia Address Low TB Performance (HEAL TB) Project, effectively trained HEWs in several areas related to TB.

Zenebech Ararso, 27, is a Health Extension Worker assigned to the Dugda Lungo health post in Illu woreda, Oromia, seven kilometers from the Asgori health center. As one of the two HEW's at Dugda Lungo, Zenebech provides a package of basic health services to the kebele/village population. She lives nearby, and works hard to always be available to her clients, who are members of her own community. Zenebech was trained to identify and refer presumptive TB cases to the health center, and she provides treatment for confirmed cases. This year, she referred 13 presumptive TB cases and registered the patients on a suspect register.

The trainings provided were the backbone of all interventions carried out at the community level. Having the necessary knowledge base has enabled me to know how to solve the community's TB burden. This in turn, brings me happiness and motivates me for better results.

One of the people Zenebech referred to the health center for presumptive TB, Abraham Shiberu, tested positive for the disease. However, the patient was not willing to receive treatment on a daily basis at the Asgori health center, which was seven kilometers away from his home. Weak from his illness, he found it too difficult to walk the 14-kilometer round-trip to the health center. Sr. Ayane, Asgori health center's TB focal person, brought this matter to Zenebech and the two discussed the need to transfer the patient to a treatment center closer to his village.

"I'm thankful for Zenebech, because she helped me get referred to Dugda Lungo Health Post. I do not have to worry about the distance, being hungry and the transport cost," said Abraham.

Now the patient is comfortable and taking his treatment daily under the direct supervision of the HEW, at the health post. He expresses gratitude to both Zenebech and Sr. Ayane for her care, support, follow up and timely transfer to the nearby health post. In this way, he became treatment adherent.

Zenebech continues to contribute to the community by directly observing treatment at the health post for several patients. She regularly updates the patients' treatment cards and sends them for follow up examinations at the HC.

"The trainings provided were the backbone of all interventions carried out at the community level. Having the necessary knowledge base has enabled me to know how to solve the community's TB burden. This, in turn, brings me happiness and motivates me for best results," stated Zenebech.

FACILITY RENOVATIONS AND STAFF TRAININGS IMPROVE MULTIDRUG RESISTANT TB CONTROL IN ETHIOPIA

Berhan Teklehaimanot
Dr. Henock Bekele

Three years ago, Azmara Ashenafi, a 35-year-old woman from the Amhara region of Ethiopia, was diagnosed with tuberculosis (TB) and placed on treatment with a first line anti-TB drug. Although she took this medicine for months, her symptoms persisted. Eventually, Azmera's cough, fever, and weight loss had become so severe that she sought further treatment at the Muja Health Center.

The Muja Health Center is supported by the PEPFAR- funded, USAID project, Help Ethiopia Address Low TB Performance (HEAL TB), and its implementer, Management Sciences for Health (MSH). Since 2012, HEAL TB has been training the health center's staff to screen patients like Azmara for multidrug resistant TB (MDR-TB), a strain of TB that cannot be treated with the two most powerful first-line anti-TB drugs.

HEAL TB's interventions also seek to address the fact that Ethiopia ranks 15th among the world's 27 high MDR-TB-burdened countries. The World Health Organization estimates that there are 6,000 new cases of MDR-TB each year in Ethiopia. In response to this challenge, HEAL TB works with local partners to improve infrastructure, screening protocols, and referral networks so the health system is better equipped to diagnose and treat MRD-TB. This support enabled the staff at the Muja Health Center to provide Azmara with appropriate and timely care. First, the newly-trained team collected sputum samples from Azmara and sent them to the Amhara Regional State Laboratory for testing. When her results came back positive for MDR-TB, the staff quickly referred Azmara to the Borumeda Hospital – the closest MDR-TB treatment facility.

HEAL TB's staff training and enhanced referral networks enabled Azmara to receive her diagnosis and begin treatment in less than four months. In the past, this process may have taken up to six months or been delayed for years, as staff did not know how or where to send sputum samples for MDR-TB diagnosis or patients for second-line TB treatment.

In addition to health center training and support, HEAL TB is also improving infrastructure at TB treatment centers throughout the country. At Borumeda Hospital, for example, HEAL TB is renovating various rooms and departments so they are fully equipped to provide MDR-TB patients with care and treatment services. Renovations include: ensuring proper ventilation throughout the facility to reduce TB transmission, expanding patient wards to increase capacity, constructing isolation rooms for highly-infectious patients, furnishing patient rooms with beds, mattress, pillows, bed-sheets, and blankets; and furnishing out-patient departments with tables and chairs.

Because MDR-TB treatment needs are so urgent, HEAL TB established a temporary ward at Borumeda Hospital where patients can be treated until the renovations are finished. Thus far, approximately 20 patients, including Azmara, have received MDR-TB treatment in this temporary ward. HEAL TB has also trained the staff at the Borumeda Hospital to manage MDR-TB patients and screen those who have been in close contact with the patients. Thanks to this training, the staff tested all of Azmera's family members and found that her three-year-old son, Feseha, was also infected with MDR-TB. The staff immediately began treating the child and both Azmera and Feseha are now stable and in good health. "I thank the Borumeda Hospital staff and other partners for diagnosing our MDR-TB and providing treatment and other support to save my life and my child's life," said Azmera.

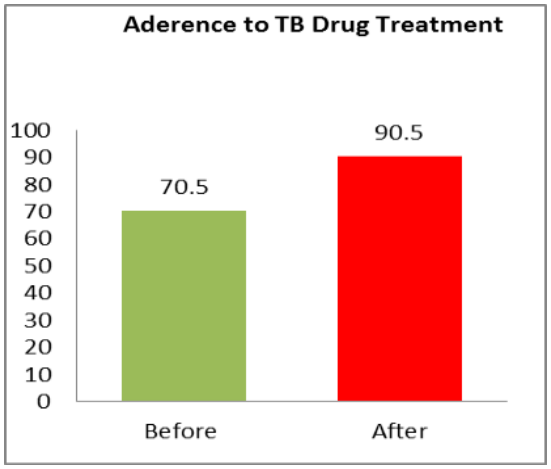
By July of 2013, HEAL TB will have finished renovating Borumeda Hospital and Debermarko Hospital so they are fully equipped to provide treatment for MDR-TB patients. Since the project began in 2011, HEAL TB has established three new MDR-TB treatment centers, renovated two centers in Amhara region, and trained 84 health workers to diagnose and treat MDR-TB patients. In the coming year, HEAL TB plans to renovate an additional 36 hospitals and train over 140 health workers in MDR-TB service provision.

IMPLEMENTATION OF TB DRUG KITS EASES DRUG SUPPLY MANAGEMENT AND IMPROVES ADHERENCE TO TREATMENT

Berhan Teklehaimanot
Mulu Legese

Ethiopia, the second most populous country in Africa with more than 87.6 million people, has more than 12 standard warehouses with a capacity of more than 2000 square meters each under Pharmaceuticals Fund and Supply Agency (PFSA) hubs serving the health facilities. Despite this, the country is still facing several setbacks such as unavailability, poor storage, and irrational use of medicines. Due to the loose anti-TB drugs, districts and health units faced challenges of incomplete supplies caused by incomplete orders. This resulted in frequent stock-outs and treatment interruption. These gaps not only aggravate many patients' illness but also contribute to the emergence and transmission of multi-drug resistant tuberculosis (MDR-TB).

Since July 2011 with the TB drug supply management intervention of USAID funded Help Ethiopia Address the Low TB Performance (HEAL TB) project, uninterrupted supply of anti-TB drugs have been possible, which benefits the country in contributing to the reduction of one of its most prevalent public health problems—TB. The project is now supporting the whole of Amhara and Oromia regions with population coverage of more than 50 million.



There was a 10 percent net increase in drug availability after the TB kit implementation

Further into the intervention, HEAL TB, as a member of the core national technical working group for the introduction and implementation of TB Patient Kits (TBPKs) in Ethiopia, developed an interim guideline for the introduction and implementation of TBPKs in Ethiopia. This guideline has been translated into local language and distributed to all RHBs, zonal health departments (ZHDs) and health facilities of the HEAL TB supported areas. About 1,947 health extension workers (HCWs) were trained in the introduction and implementation of TB drug kits in both Amhara and Oromia regions. HEAL TB in collaboration with the Federal Ministry of Health (FMOH), regional health bureaus (RHBs) and PFSA has conducted an assessment on the implementation of the TB drug kits prior to the national scale up where key findings were documented and are being utilized in the scale up process.

The assessment revealed that TB kit implementation simplifies drug supply management over loose form. There is an impressive preference of TB kit exclusively by eight in every 10 facilities. TB kit improved adherence to treatment than a loose form. Net improvement of 19 percent was witnessed in adherence at kit implementing facilities than those implementing loose forms. Improving patient confidence and treatment monitoring are aspects of kit implementation that significantly contributed to better adhere to treatment.

TB kit improves availability of drug as the inventory control is improved due to the ease of recording and reporting. Ten percent net increase in the availability of the drug was observed due to TB kit implementation.

In summary, TB drug kits implementation in Ethiopia is a feasible strategy to ease drug supply management and encourage adherence to treatment through building patient confidence and enhancing treatment monitoring that ultimately ensures good treatment outcome.

SAMPLE COLLECTION AND TRANSPORTATION SYSTEM ENABLES NON-DIAGNOSTIC HEALTH CENTERS TO DIAGNOSE TB

Twenty-two-year-old Melkamu Belete was misdiagnosed and left without proper treatment for six months. Although Melkamu had visited four health facilities to be treated for a cough, fever, and loss of appetite, the health care staff did not test him for tuberculosis (TB). Instead, each facility sent him home with antibiotics that did not heal him. Despite worsening symptoms, Melkamu eventually gave up and stopped seeking medical advice.

Eventually, Melkamu's younger sister, Yelemset, began complaining of similar symptoms. With the help of relatives, Yelemset traveled to the Kuy Health Center, where she was diagnosed with TB. After placing Yelemset on TB medication, the team at Kuy Health Center notified the staff at their partner facility, Gerems Health Center, that Yelemset was being treated for TB. A health worker from Gerems followed up with Yelemset in her home and screened her family members for TB: finally Melkamu had a proper diagnosis.

Though Gerems Health Center does not have diagnostic capabilities, they, along with 14 other non- diagnostic health facilities in East Gojam Zone, have been part of a sputum sample collection and transportation project supported by the PEPFAR-funded, USAID project, Help Ethiopia Address the Low TB Performance (HEAL TB), led by Management Sciences for Health (MSH). This initiative allows health facilities without microscopes to send samples to facilities with microscopes for testing: a low–cost and life-saving solution.

Today, Melkamu's health has improved significantly. "I was desperate and about to stop going to school [because I was so ill]. I am glad that I started treatment. I am now strictly following my medication," said Melkamu.

Since the transportation initiative started in April 2012, HEAL TB has provided clinical TB training for nearly 300 health care providers in East Gojam Zone of Amhara regional state. Fifty-eight of these health care providers were from the non-diagnostic health centers. Over 10,000 clients have been screened for TB at health facilities and through home visits in Amhara.

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