

SUCCESS STORY

Championing the Fight Against MDR-TB in East Central Uganda Through Community Case Management

USAID'S REGIONAL HEALTH INTEGRATION TO ENHANCE SERVICES IN EAST CENTRAL UGANDA (USAID RHITES-EC)

As a mother of six, a wife, and a schoolteacher, 38-year old Aisha was concerned about her own health when she started coughing up blood. Worried that she might have contracted tuberculosis again, she did not also want to transmit this disease to her family and community in Naibugu village in Iganga district. Thanks to the team of health workers at Iganga General Hospital Multi-Drug Resistant Tuberculosis (MDR-TB) Clinic (MDR-TB Clinic) and the support of the USAID RHITES-EC project, Aisha became one of the lucky few whose MDR-TB was detected, treated appropriately, and cured.

At Iganga's MDR-TB clinic, the health workers understand the potential repercussions of mismanaging drug-resistant TB (DR-TB). *"If we delay starting DR-TB patients on appropriate treatment, it can escalate the transmission rate of the disease to numerous people, including health workers,"* says Yakut Mayaye, a clinician at the MDR TB clinic. According to the World Health Organization (WHO), TB is one of the leading infectious killers globally, and the leading killer of people living with HIV. Furthermore, approximately only one in four MDR TB cases is detected globally and of those, only one in two cases cure. With this context in mind, the MDR TB clinic located at Iganga General Hospital was opened in March 2013 by the Uganda Ministry of Health to improve access to quality health services for people with MDR-TB in East Central Uganda. Since its inception, the MDR -TB clinic has initiated over 100 patients on DR-TB treatment.



A team of health workers attending to Aisha during the monthly review clinic at Iganga General Hospital MDR-TB Center in East Central Uganda on 28th March 2018 © USAID RHITES-EC/ Photo taken by Louisa N. Kiggwe

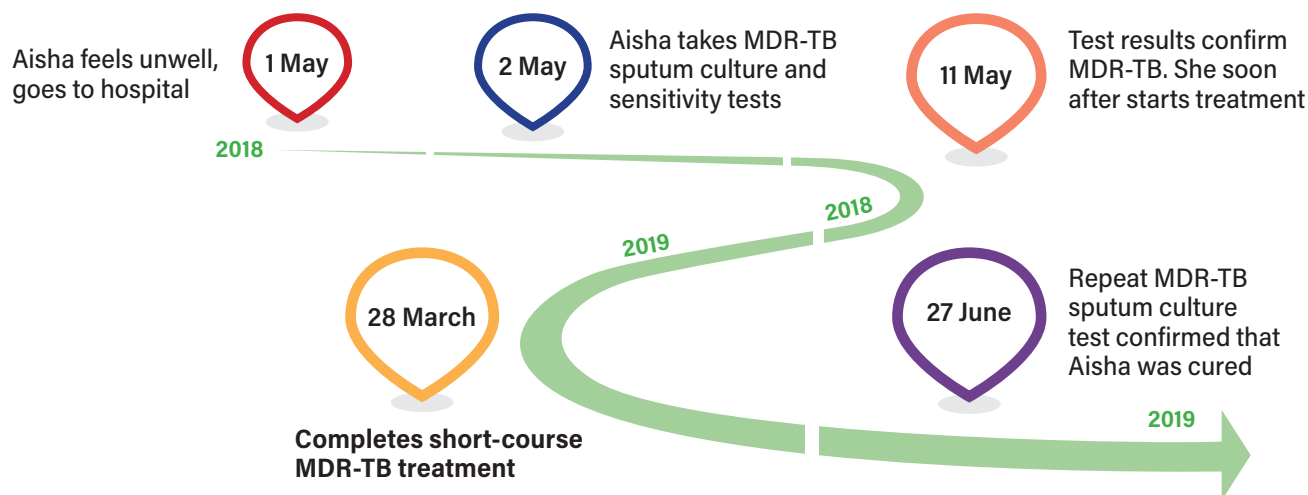
Paving the Way to Diagnosis

On 1st May 2018, Aisha arrived at Iganga General Hospital with excruciating chest pain; she was also coughing up blood stained sputum. *"I came to the Outpatient Wing of the Hospital when I had a severe chest pain,"* reminisces Aisha. Although Aisha tested negative for HIV, she had previously been diagnosed and treated for tuberculosis (TB) in 2014. A sputum sample was collected for testing and results received the next day (2nd May 2018) revealed that Aisha had developed a recurrence of TB that was resistant to one

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Figure 1: A timeline of key events on Aisha's journey to recovery



of the first-line anti-TB medications, rifampicin. It was on this basis that Aisha was referred to the MDR-TB Clinic for MDR-TB management.

Other sputum samples were sent to the Uganda National Tuberculosis Reference Laboratory (NTRL) and results confirmed within a week that she was resistant to both rifampicin and isoniazid, but sensitive to second-line drugs (injectables and fluoroquinolones), on which she was accordingly treated for MDR-TB. These samples were hand-delivered to NTRL 120 km away by one of the team members with support from USAID's Regional

Multi-drug resistant tuberculosis

(MDR-TB) is a form of tuberculosis (TB) infection that does not respond to at least isoniazid and rifampicin, the two most powerful anti-TB medications.

Health Integration to Enhance Services in East Central Uganda (USAID RHITES-EC). The project also provides technical assistance on proper collection, packaging and transportation of potentially biohazardous samples like MDR-TB samples and facilitate their transportation. *"I hand-deliver samples to facilitate early initiation of patients on the appropriate treatment,"* says Joseph Frank Maganda, a laboratory assistant at the MDR TB Clinic.

With a confirmed laboratory diagnosis, Aisha was initiated on the appropriate MDR-TB drugs at Iganga General Hospital MDR TB clinic. To ensure compliance, it was

required that Aisha's MDR TB treatment be administered by a health-worker. This is known as *"Directly Observed Therapy"*. As a measure of facilitating adherence for Aisha, the MDR-TB Clinic collaborated with Nakalama Health Center II, a *"follow-up facility"* identified by Aisha and located near her home to ease her access to directly observed therapy (DOT) from a health worker. *"Every morning I would go to the health center to receive and take my medicine under the close watch of the health worker; I was not allowed to take it at home,"* intimates Aisha.

USAID RHITES-EC supports MDR-TB training of the health workers from the *"follow-up facilities"*. This training focuses on administering of daily treatment, monitoring for drugs side effects, clinical improvement and infection prevention. The project further supports a health worker from the *"follow-up facility"* to escort the patients to the Iganga MDR-TB Center on a monthly basis.

USAID RHITES-EC also facilitated the MDR-TB treatment team to visit Aisha's home. At this visit the team assessed the ventilation situation of her home; sensitized her family members about DR-TB; and oriented them about Aisha's need for support to enable her to adhere to treatment. The team further conducted contact investigation to identify family members with TB symptoms. *"My husband and six children were screened for TB by the health workers, and I am thankful that none of them had any TB symptoms,"* said Aisha. The follow-up facility closely monitored the family every six months to ensure that they do not develop TB.

Setting Up the Journey to Recovery

Once a month, a health worker from Nakalama Health Center II, a follow-up facility located near Aisha's home accompanied her to the MDR TB clinic at Iganga Hospital for treatment refills. The health worker also received further capacity building to manage MDR-TB. *"We invite health workers from follow-up facilities to the initiation site, to build their capacity in the management of DR-TB, by assessing the patient together. If we fail to treat a patient with DR-TB, we risk transmitting it to ourselves and the community,"* says Yakut Mayaye, a clinician at the MDR-TB Clinic. This joint assessment involves the management of treatment side effects, mainly hearing loss that patients suffering from DR-TB are susceptible to getting. The assessment continued until the end of Aisha's treatment

"Today, I am cured of TB, and I can bring up my six children because I remained on treatment, with support from my heroes—the team of health workers—who supported me," says a delighted Aisha.

and contributed to Aisha's quick recovery. It was also observed that within a period of one month on treatment, Aisha who was underweight weighing 53.1 kg (with a Body Mass Index (BMI) of 17.3) gained 3 kg.

Achieving High Treatment Success Outcomes

As a result of collaborating with a follow-up facility to implement community-based case management, Aisha was discharged by the MDR-TB Clinic ten months later on 28th March 2019 at a weight of 59.2 kg with a BMI of 19.2, within the normal range. On the day of her discharge, Aisha had one last sputum sample taken off to confirm her MDR-TB status. On 27th June 2019, Aisha returned to the Clinic for a review, and she was informed that she was MDR-TB negative!

In the period October 2018 to March 2020, the Iganga General Hospital MDR -TB Clinic treated 18 DR -TB patients with support from USAID RHITES-EC, Ministry of Health, and other implementing partners. In this period, the MDR-TB clinic has achieved a treatment

MDR-TB Surveillance in East Central Uganda

As a surveillance mechanism for MDR-TB, RHITES EC :

- Facilitates and provides technical support for contact tracing and testing all contacts of MDR-TB patients for TB
- Provides technical and logistical support to all healthcare facilities, and it further supports referral of samples from 130 lower health facilities to 20 referral healthcare facilities in the region with GeneXpert machines. This ensures that all bacteriologically confirmed TB patients in East Central Uganda are tested with TB GeneXpert machine.
- Facilitates transportation of samples of presumptive MDR TB cases to the National TB reference laboratory for TB culture and drug sensitivity testing.
- Supports initiation of treatment for patients diagnosed with MDR-TB at Iganga General and Jinja Regional Referral Hospitals.

success outcome of 82 percent for all its patients using the community case management approach. In this same period, the MDR-TB clinic staff traced 627 close contacts of the DR-TB patients, identified 63 presumptive TB cases; four TB drug sensitive cases; and two more TB-DR cases, and initiated them all on appropriate treatment.

All MDR-TB survivors are appointed as ambassadors upon their discharge from the MDR TB Clinic. This is because cured patients have personal experiences that other people can learn from. Whenever Aisha comes across anyone exhibiting signs and symptoms of TB, she refers them for testing at the healthcare facility.

"I have gone out of my way to encourage people with persistent coughs to seek medical care, and I always tell them that if they are diagnosed with TB, they should not be afraid because it is curable and preventable," adds Aisha.

