

Fighting multidrug-resistant TB in the DRC

Results of MDR-TB programming scale-up in seven provinces

IMPORTANCE

The Democratic Republic of the Congo (DRC) experiences one of the highest burdens of tuberculosis (TB) in the world.¹ Resistance to TB drugs is a growing problem in the DRC. Factors contributing to the development of multidrug-resistant TB (MDR-TB) include a widespread lack of appropriate screening for TB, logistical challenges that prevent effective transport of sputum samples to laboratories, limited diagnostic capacity, long delays in receiving test results, inappropriate TB drug use, and shortages of second-line TB drugs. MDR-TB cases in the DRC are estimated to be close to 3,000.

APPROACH

With support from the United States Agency for International Development (USAID), PATH worked with the DRC Ministry of Health to introduce and scale up MDR-TB interventions across seven of the DRC's largest provinces over a four-year period (2010-2013). The aim was to increase the number of MDR-TB cases detected, help these patients initiate treatment faster, and support patients to complete the difficult MDR-TB treatment regimen.

IMPLEMENTATION

PATH started by using the World Health Organization (WHO)-endorsed MDR-TB planning toolkit to develop a programmatic management scale-up plan; training health workers to identify opportunities to screen patients with possible MDR-TB and providing them with tools to collect and transport specimens to the reference laboratory for testing; and supporting the introduction of new diagnostic tools such as the GeneXpert® to the laboratory network. PATH also introduced treatment adherence packages that have contributed to increases in treatment compliance.

Training national MDR-TB experts to train providers in MDR-TB management

The project provided training support to build capacity at the central health system level through creating a cadre of national MDR-TB experts who in turn mentor provincial-



Photo: PATH

A patient receives a treatment adherence kit.

level staff, particularly outside of the metropolitan Kinshasa area. Over the course of the project, one national expert, 84 provincial clinicians, and 1,035 providers were trained to detect and manage MDR-TB patients at the local level.

Strengthening diagnostic capacity

To strengthen the laboratory system, the project procured culture and drug susceptibility supplies for the National Reference Laboratory, provided technical assistance to update the national laboratory strategy to take into account new, rapid diagnostic tools, and helped mobilize community members to transport specimens from regional and district health centers to the national reference laboratory for testing. The project also provided a GeneXpert® machine to Kindu, and trained laboratory staff to detect MTB and rifampicin resistance. As a result, 1,689 persons presumed to have MDR-TB were tested—among whom 128 were confirmed and 111 started treatment—over the course of the four-year intervention.

Mobilizing community support for MDR-TB patients to complete treatment

In close collaboration with the Club des Amis Damien (CAD), a Congolese civil society organization created and managed by former TB patients, PATH has developed a treatment adherence support package that provides transport

¹ World Health Organization Global Tuberculosis Report 2013

assistance, payment for laboratory monitoring of side effects, household essentials, and home visits to patients. Home visits, conducted by local CAD members, provide critical psychological support and encouragement to help patients cope with the two-year treatment regimen and have been found to be a key component in treatment success.

RESULTS

These efforts have made an impact on lives around the country and have helped to strengthen the health system's ability to manage drug-resistant TB. In just four years:

- 2,705 presumptive MDR-TB specimens were collected from Kinshasa alone and sent to the National Reference Laboratory (NRL), and another 4,646 sputum specimens were sent to the NRL for testing.
- Of those tested, 128 people were able to receive a diagnosis of MDR-TB and 111 additional patients initiated treatment.
- A total of 627 patients benefited from treatment adherence packages and other support distributed by PATH to help ensure completion of treatment.
- By the last year of the project, screening of those presumed to have MDR-TB increased in project sites from 16% in the first half of the year to 51% by the second half of the year.
- Of the 125 MDR-TB patients who started treatment in 2011 and were evaluated, 105 (84%) successfully completed treatment, an improvement compared to the previous cohort (which had a 61% treatment completion rate).
- The project supported the training of 230 CAD members from 23 new groups in five project-supported regions to provide counseling, health education, home visits, and collection of sputum specimens.

LESSONS LEARNED

A number of important programmatic lessons learned over the course of this project should be considered for application in future projects. Six are highlighted here:

1. Future findings should focus more on case-finding and scaling up programmatic management of drug-resistant TB (PMDT) and addressing co-infection.
2. Ceremonies for distributing treatment adherence packages were valuable, encouraged MDR-TB patients to seek treatment, and improved patient outcomes.
3. Training of providers to minimize missed opportunities to screen for MDR-TB significantly increased the number of MDR-TB suspects tested and reduced diagnostic delays.
4. Installing a reliable transportation system and training providers in specimen transportation ensures quality of specimens reaching the laboratory.
5. Community-based organizations can be a great asset to health care programs when necessary investments are made in their technical and organizational capacities to support interventions.
6. Given the experiences of Kindu, scaling up use of the GeneXpert® to all provinces will be essential to strengthening diagnostic capacity. However, efficient means of transporting specimens to testing sites are still necessary.

ACKNOWLEDGMENTS

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