

Democratic Republic of Congo

University of North Carolina at Chapel Hill

Introduction of Xpert MTB/RIF to improve early diagnosis and treatment of smear negative TB at the primary health care level Kinshasa, DRC (Xpert MTB Project).

The Democratic Republic of Congo (DRC) has the 10th highest burden of tuberculosis (TB) worldwide. In 2011, there were estimated to be over 500,000 TB cases in DRC, 220,000 of which were new cases. Moreover, 18% of TB patients tested for HIV were HIV positive. The DRC case detection rate of 46% is low, well below the Stop TB targets of 70% by 2015. This is attributable in part to decades of instability and war which has left the DRC's health infrastructures in shambles. Smear microscopy is the only diagnostic tool available for the majority of patients, even in the capital city of Kinshasa with its population of 10 million. Diagnosis of smear negative TB often is either delayed or fails to take place, as many patients do not stay in touch through the lengthy process, resulting in continued transmission. A follow-up test to smear microscopy which can be administered at the point of care in primary health facilities has the potential of substantially improving the case detection rate in the DRC.

In December 2010, the WHO endorsed Xpert MTB/RIF as a first-line diagnostic tool for tuberculosis in suspects of HIV-associated TB and as a follow-up test to microscopy in smear-negative specimens. With funding from TB REACH, the University of North Carolina at Chapel Hill, in partnership with the Kinshasa School of Public Health and in collaboration with the DRC National TB Program, initiated a project to pilot the introduction of Xpert MTB/RIF as a follow-up test for smear-negative TB suspects at the primary health care level in Kinshasa.

At fifteen primary health facilities a GeneXpert machine and a power generator for electricity supply were installed. One hundred and sixty five health personnel, including 62 laboratory technicians (most without previous computer literacy) from 40 clinics were trained. A network of volunteer's was developed to transport samples and test results from facilities without a GeneXpert instrument. A system to facilitate centralized access to second line treatment for those identified with Rifampicin resistance was also implemented.

Despite the difficulties inherent in the implementation of such an ambitious project in the challenging environment of Kinshasa, the project is up and running. Over 7000 suspects were screened and about 2000 tests were carried out in the first three months. Of those tests, 17% were positive for M. tuberculosis and 4 cases with rifampicin resistance were detected. With the sample collection network in place and the strengthening of the MDR-TB control system in the city, the project is improving TB control beyond its prime target. The project aims to screen over 30,000 TB suspects and test over 20,000 with smear negative specimens across 22 of the 35 Health Zones in Kinshasa.

These results would not have been possible if not for the enthusiastic welcome the project has received across the board, from clinical health staff to government officials.

Stop TB Partnership
TB REACH



FINDING AND TREATING PEOPLE WITH TB IN THE WORLD'S POOREST COMMUNITIES

TB REACH

The first wave of projects
increased case detection
by an average of 26%
compared to
the previous year

More than nine million people around the world become ill with tuberculosis (TB) each year. About one-third of them fail to get an accurate diagnosis or effective treatment and are more likely to die from this curable disease.

By supporting the many partners working in the field, TB REACH offers a lifeline to people among this missing 3 million by finding and treating people in the poorest, most vulnerable communities in the world. In areas with limited or non-existent TB care, TB REACH supports innovative and effective techniques to find people with TB quickly, avert deaths, stop TB from spreading, and halt the development of drug resistant strains.

- TB REACH was launched in 2010 and will run until 2016, thanks to a CAD\$ 120 million grant from the Canadian International Development Agency.
- TB REACH is committed to getting funds to our partners with a very short turnaround time.
- TB REACH has committed nearly \$50 million to partners working on 75 projects in 36 countries covering a wide range of interventions.
- Preliminary analysis from Wave 1 shows that efforts of partners led to an increase of 26% in TB case detection over an area of 100 million people, while some areas saw increases of more than 100%. The average cost per person covered is US \$0.15.

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