It's never good to be sick, but it's especially difficult when you live far away from the clinic where you need to go - not once but several times – for tests, just to get an initial diagnosis, as is often the case when tuberculosis is suspected. It is no wonder that many such people delay going to see a doctor or try to self-treat. As a result, tuberculosis is detected late and its treatment becomes burdensome and sometimes ineffective. Rapid testing can be very useful in solving this problem.

The need for rapid TB diagnosis is particularly urgent in countries with a high level of drug resistant tuberculosis and a large rural population. Moldova—a small country in South East Europe with a population of 4 million—is such a country. During the last decade Moldova faced sharp increases in the incidence of drug resistant tuberculosis. In 2011 the rates of drug resistance were 26.0% among new TB cases and 63.4% among people previously treated for TB. Delays in diagnosis meant that these people continued to spread the multi-drug resistant form of the disease in their communities even though, ironically, treatment of drug-resistant tuberculosis is provided free of charge in Moldova.

Moldova has a well-developed network of laboratories with qualified staff for tuberculosis diagnostics, but testing is typically carried out using traditional technologies which not only take three to four weeks to reach a diagnosis, but they cannot determine the resistance of the patient to 1st line drugs.



Moldova

PAS Center

Enhancing TB diagnosis and MDR detection by rolling out Xpert MTB/RIF technology at district level, with special emphasis on high risk groups — prisoners and PLWH



A TB REACH project has allowed for introduction of modern diagnostic technology and considerably expanded the capacity of the existing network of laboratories with the procurement of 25 GeneXpert systems. The technology was implemented in rayons and municipality laboratories, as well as in penal institutions, which have the highest level of tuberculosis and TB/HIV co-infection. Laboratory staff were trained in the use of the new system; an information campaign was launched explaining the advantages of the new technology and TB suspect patients were vigorously encouraged to be screened for the disease.

Although health care personnel were initially doubtful that the GeneXpert system could deliver results as promised, after only two months, with results determined through rapid testing confirmed by other methods, they were convinced.

This new development is a great aid to the Department of Communicable Diseases, which treats PLWH. ARV-therapy is available in Moldova, so the capability of treating TB/HIV co-infection exists. Rapid diagnosis of tuberculosis, and determining the possible drug resistance in HIV positive patients, greatly enhances the chances for successful treatment and averts death.

The TB REACH project represents a considerable step forward in the development and improvement of tuberculosis services in Moldova. The statistics are eloquent. Testing with GeneXpert began in April 2012 with a total of 3,876 sputum tests on MTB performed, 980 patients (25.3%) diagnosed as MTB+ and 353 of them (36.0%) as resistant to rifampicin. Proper treatment was able to begin immediately.







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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