As at: 12/2016

Health — Tajikistan

Modern standards in combating tuberculosis

After the collapse of the Soviet Union, healthcare in Tajikistan has massively deteriorated. Most notably, poverty-related diseases such as tuberculosis were on the rise. KfW Development Bank helps Tajikistan to improve its diagnostic capabilities and to treat the disease in accordance with the standards of the World Health Organization (WHO).

Context

Tuberculosis (TB) tops the worldwide statistics for deadly infectious diseases. In most cases the bacteria affects the lungs. As a result of increasing poverty and the deterioration of healthcare, the disease has spread quickly, especially in the countries of the former Soviet Union.

The situation in Tajikistan is alarming: The disease has spread due to errors made in the 1980s and 1990s with regard to treatment and diagnosis, and there is now an increasing number of sick people with multi-resistant tuberculosis pathogens. However, there is no reliable data available on this subject. The WHO assumes that out of the 6,850 recorded cases in Tajikistan in 2012, 80% were new cases. As far as the WHO is concerned, Tajikistan is one of the 18 countries in the European region with the highest priority for fighting tuberculosis.

Project approach

Tuberculosis can only be successfully contained if the infection is detected early and is treated with medication. Since 2002, KfW Development Bank has been helping the government of Tajikistan with the implementation of a nationwide TB programme. On behalf of the German federal government, it has contributed a total of EUR 17.6 million in funding a programme that is aimed at breaking the tuberculosis infection chain in all its forms as early as possible and containing the epidemic.

As part of the programme, modern standards are used to diagnose and treat the disease. Investments in this health sector are extremely effective: Compared to traditional methods, the modern treatment of new cases of people suffering from pulmonary tuberculosis costs far less, in contrast to multi-drug resistant (MDR) patients’ treatment - costing USD 50 to 120 per person.

In concrete terms, the current stage of the programme involves setting out the preconditions for successful detection and treatment of standard tuberculosis and

<table>
<thead>
<tr>
<th>Project name</th>
<th>Fighting tuberculosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commissioned by</td>
<td>Federal Ministry for Economic Cooperation and Development (BMZ)</td>
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<tr>
<td>Country/region</td>
<td>Tajikistan</td>
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<td>Lead executing agency</td>
<td>Ministry of Health and Social Protection in Tajikistan</td>
</tr>
</tbody>
</table>

As at: 12/2016
multi-resistant tuberculosis. This requires special laboratory diagnostics as well as an extensive therapy in order to treat the patients individually.

The “Macheton” hospital (named after the Macheton village), near the capital city Dushanbe, plays a vital role in the nationwide TB programme. Almost entirely destroyed during the civil war in 1992–1997, it has now been restored and equipped with modern diagnostic equipment, enabling it to fulfil its function as a national TB reference hospital. In 2014, the rehabilitation of the regional TB hospital in Khujand (northern Tajikistan) began, which was in a similarly desolate state.

The overall concept for “Macheton” also incorporates a national reference laboratory alongside the MDR tuberculosis department. As tuberculosis is a highly infectious disease, it is not only necessary to educate and train medical personnel and to teach them comprehensive laboratory techniques. Also, the creation of a functional safety and quality management system is proposed. This complex task is undertaken by the specialists at the Supra-National Laboratory (SRL) in Gauting near Munich.

It is one of the WHO’s 25 supra-national reference laboratories for tuberculosis around the world. A corresponding agreement for this exists between the SRL and the Tajik laboratory. All the costs concerning the agreement such as construction costs, materials, equipment supply and training are assumed by KfW. These measures are aimed at creating the preconditions for the Tajik laboratory to set up and conduct a nationwide resistance study. The Tajik government will bear the costs for the laboratory in the medium term.

**Impact**

The introduction of the DOTS (directly observed treatment, short course) strategy of the WHO is also aimed at containing the disease. It focuses on the early detection of the disease and the immediate treatment of patients. Following the introduction of this strategy, the stationary treatment is considerably shortened and the costs are significantly reduced.

As a result of the introduction of DOTS, the number of beds required and the TB health care services structure can be greatly reduced. By tackling its TB problem, Tajikistan also helps the neighboring countries of Afghanistan, Uzbekistan and the Kyrgyz Republic. Since the level of border traffic is high, the population in the entire region is affected.