Rapid and Accurate: GeneXpert Diagnosis Leading to Effective TB Treatment

Photo: USAID/ AFIAT



Zubair, on the left, on his regular TB treatment visit in Qaisar district hospital.

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Zubair

Zubair, a 30-year-old day-laborer from Faryab Province, used to commute to work every day to support his family. His routine was disrupted when he began suffering from severe cough, loss of appetite, night sweats, and weakness. "For weeks, I endured these symptoms, which hindered my ability to work," he explained. Qaisar district, with a population of around 350,000 people, is one of the largest districts in Faryab Province and is located about 62 kilometers from the capital city of Maimana.

The district's population often faces challenges in accessing quality healthcare and receiving accurate diagnoses, especially for TB. Addressing the problem, the USAID/AFIAT activity installed a GeneXpert machine at the Qaisar Community Health Clinic (CHC). This advanced diagnostic tool delivers rapid and precise TB diagnoses, including detailed information on each case's specific drug resistance. This allows for the timely and appropriate administration of effective treatment regimens, significantly improving patient outcomes. Zubair visited the Qaisar CHC, where doctors used the GeneXpert machine to render a TB diagnosis. "Within hours of the test, I was diagnosed with TB and began receiving free treatment," he said. After three months of treatment, his health steadily improved, allowing him to return to daily activities. The CHC also carried out contact tracing for all members of Zubair's family, and, luckily, found no one else infected with the disease.

The USAID/AFIAT-supplied GeneXpert machine and lab technician training have significantly increased TB detection rates at the clinic. In 2023, 39 confirmed TB cases were detected in six months through microscopy examinations. With the installation of the GeneXpert machine in February 2024, the number of confirmed TB cases increased to 52 in in six months, a 25 percent increase in TB detection.

The USAID/AFIAT-supplied equipment and training has made TB testing more accessible for many people in Qaisar, "Previously, we had to refer patients with suspected symptoms to Maimana for diagnosis," explained Safdar*, an AFIAT-trained lab technician and GeneXpert. "Now, we no longer miss any TB-infected patients, which has led to higher community trust in our services."