

FOCUS ON

Drug-resistant Tuberculosis



The Global Fund / Jonas Gratzner

Drug-resistant TB is a major global public health problem that threatens the significant progress made in TB care and prevention in recent decades.

Drug-resistant TB is part of the growing challenge of antimicrobial-resistant superbugs that do not respond to existing medications, resulting in fewer treatment options and increasing mortality rates for illnesses that would ordinarily be curable – including TB. Global development partners must move faster to contain this threat of antimicrobial resistance (AMR) before it escalates to claim millions of lives around the world.

The rise of antimicrobial resistance coincides with the growth of TB. Despite steady progress since 1990, it is estimated that the disease killed about 1.6 million people in 2017, surpassing HIV as the world's leading killer among infectious diseases. Drug-resistant forms of TB are also on the rise, complicating an already dire situation.

The Challenge

In most cases, tuberculosis is treatable and curable. However, standard TB treatment requires up to six months of drugs that can cause nausea, vomiting and stomach pain. The duration and side effects drive some people to abandon their treatment, which can lead to drug resistance – when tuberculosis bacteria is resistant to at least one of the main TB drugs.

Globally, only half of multidrug-resistant tuberculosis (MDR-TB) patients who initiate treatment are successfully treated, mostly due to high mortality and falling out of the treatment programs. Outcomes for individuals with extensively drug-resistant tuberculosis (XDR-TB) are worse – as reported by WHO in 2017, only 30% of patients were successfully treated.

As antimicrobial resistance goes, tuberculosis is an enormous problem. Deaths from drug-resistant TB now account for about one-third of all antimicrobial resistance deaths worldwide. Treating drug-resistant TB is costlier and can take three to four times as long – not all people survive.

In 2017, there were approximately 558,000 cases of drug-resistant TB. A recent study published in The Lancet Infectious Diseases forecast that cases of drug-resistant TB will increase in four high burden countries – India, the Philippines, Russia, and South Africa – over the next 20 years. That rise is likely to come from increased transmission of drug-resistant TB between people, rather than drug resistance developing from misuse or mismanagement of TB drugs.

To achieve the global goal of ending TB as an epidemic by 2030 and prevent a potential health disaster, global health partners must stop the spread of drug-resistant TB. The Global Fund is a major external source of financing for the drug-resistant TB response in low- and middle-income countries. The amount of MDR-TB funding available through the Global Fund has more than tripled over the last six years through reprogramming of existing grants. Yet, those investments are not nearly enough.

FINDING MISSING CASES

Despite treatment success and lower mortality rates, “missing” people with TB – people who are not diagnosed, treated or reported – are a major challenge in the fight against TB, and contribute to the growing problem of drug-resistant TB. Worldwide, 36% of the 10 million people who get sick with TB were missed in 2017.



TB continues to be a major public health issue worldwide. In Anastasia's home country of Belarus, nearly 38% of new TB cases are MDR-TB. By comparison, the global average is just over 4%. Anastasia will beat MDR-TB, and the Global Fund continues to support countries to improve prevention, diagnosis and treatment – to meet the target of ending the TB epidemic by 2030.



After three years of treatment, Aftab Ansari was finally cured of drug-resistant TB, but the disease robbed him of his livelihood and drove him into debt. With 27% of global cases, TB will cost India more than US\$250 billion through 2030, according to one study.

The Global Fund Response

In addition to regular TB interventions, the Global Fund set aside US\$115 million for the implementation period 2018-2020 to stimulate additional efforts to find missing patients in 13 high-burden countries, representing three-quarters of the missing people with TB globally (Bangladesh, India, Indonesia, Myanmar, Pakistan, the Philippines, DRC, Kenya, Mozambique, Nigeria, South Africa, Tanzania and Ukraine). Among other things, this means adding TB screening to other routine check-ups during medical visits, and developing more efficient and effective ways for private health care providers who are treating TB cases to report those cases to the national TB program.

By the end of 2018, the 13 countries notified almost 4.6 million TB patients compared to 3.7 million 2015. If these notification trends continue, the 13 countries will be on track to achieve the target of finding 1.5 million additional people with TB by the end of 2019.

Diagnostic Technology

GeneXpert technology has transformed the way the world diagnoses drug-resistant tuberculosis. It has allowed screening of thousands of TB cases around the world, quickly and efficiently. The Global Fund partnership is investing heavily in expansion of this technology but the need continues to be bigger than the resources available. There is also need to expand the testing for resistance to second line medications. This is important in helping identify patients with drug-resistant TB to initiate them on more effective and less toxic treatment regimens as recommended by WHO.

New Drugs

The Global Fund is supporting countries to introduce bedaquiline and delamanid, two groundbreaking new drugs for the treatment of drug-resistant TB. As bedaquiline is currently available free through a USAID donation from Janssen Pharmaceuticals, countries have been able to reprogram Global Fund investments that were originally set aside for treatment of the disease,

freeing up funds to support additional MDR-TB interventions. The new drugs have fewer side effects and are more effective, increasing the chances that people will stay on the treatment and be cured.

Community Involvement

TB patients frequently stop treatment before it is completed, leading to drug-resistant TB. The Global Fund invests in community systems, supporting volunteers to raise awareness, fight stigma and improve access to TB health services, treatment and care. By supporting community health workers who knock on doors and support community members through treatment, the Global Fund is working with local health workers across the world to prevent people from getting drug-resistant TB and to treat those already affected by the disease.

Results in 2017 in Countries Where the Global Fund Invests



5 MILLION

PEOPLE WITH TB TREATED



102,000

PEOPLE WITH
DRUG-RESISTANT TB
ON TREATMENT



3,180

PEOPLE WITH EXTENSIVELY
DRUG-RESISTANT TB
ON TREATMENT



97,500

CHILDREN IN CONTACT
WITH TB PATIENTS
RECEIVED PREVENTIVE
THERAPY



Reuben Kimweli tracks down cases of tuberculosis that go undiagnosed, untreated or unreported in his community in Kibera, Kenya. Working for a program run by Amref Health Africa, he is one of thousands of community health workers on the frontlines of the global effort to reduce emerging drug resistance.

Health Security

Diseases know no borders; as people move, so do diseases. Untreated, a person with active TB can transmit the infection to 10-15 people over the course of a year. In a globalized world, ending TB is critically important for all across the world. Ending drug-resistant TB will not only save millions of lives and reinvigorate communities and economies in vulnerable, low- and middle-income countries, it will also have an impact in improving global health security. In addition to grants allocated to countries, the Global Fund partnership is providing special funding to address cross-border issues including MDR-TB response among migrant workers, and providing treatment to refugees and internally displaced people. The Global Fund is also investing to accelerate care and treatment for populations disproportionately affected by drug-resistant TB, such as poor people in crowded settings, migrants, prisoners, refugees, miners and people who use drugs.

Stronger Systems for Health

In the end, the response to drug-resistant TB relies heavily on strong and functional health systems. One-quarter of the Global Fund's investments support building resilient and sustainable systems for health, including training for health workers, improved facilities and access, and strengthened information systems and supply chain management.



In Zaatar camp in the Jordanian desert, the Global Fund is supporting the provision of essential TB prevention, diagnosis and treatment services to Syrian refugees. What started as a temporary shelter for people fleeing the conflict in Syria has grown into a city of about 80,000 people. The people here benefit from TB services such as screening upon arrival, medical care and referral services, as well as health education.

About the Global Fund

The Global Fund is a 21st-century partnership designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics. As a partnership between governments, civil society, the private sector and people affected by the diseases, the Global Fund mobilizes and invests nearly US\$4 billion a year to support programs run by local experts in more than 100 countries. By challenging barriers and embracing innovative approaches, we are working together to better serve people affected by the diseases.

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