Austerity poses risk to funding for battle ahead

Tuberculosis has failed to capture imaginations the same way as HIV, reports Andrew Jack

If it needed you just a short exposure to another student’s cough to be enough to catch the deadly disease, as it is with the mighty flu bug, the fight against tuberculosis would be much easier.

As donor nations meet in Brussels next month to discuss fresh support for the Global Fund to Fight AIDS, TB and Malaria, the world’s biggest multilateral funder of health programmes, the fate of such patients will be at stake.

Against the backdrop of austerity and cuts to international development budgets, TB will fade from international public imagination and triggered funding from donors over the past decade, including an increasing share from governments of the countries most affected. TB has struggled to win support. Austerity means that TB needs to be tested for TB and vice versa. You can’t separate projects.

That is particularly serious because the absence of sufficient financial commitments by countries is the top challenge,” says Mario Raviglione, head of the TB programme at the World Health Organisation (WHO). “TB needs to be on the Global Fund’s agenda from day one, unlike HIV.”

TB is the most neglected of the three diseases supported by the Global Fund, with disbursements from a share of the three diseases’ $9.5bn current budget currently capped just above previous levels of 16 per cent of total expenditure, far less than the 25 per cent that UN experts believe is needed.

The Global Fund to Fight Aids, TB and Malaria, launched in 2001, is a $16bn (£9.5bn) multi-bi donor fund that funnels money into health projects and aims to stop AIDS, TB and malaria from spreading.

But TB has struggled to win the billions of dollars’ worth of fresh support that it needs to fit the same category as HIV.

TB currently affects an estimated 200,000 people globally. Since the 1990s, TB has been outshone by HIV when it comes to capturing the public imagination and triggered funding from donors around the world. Much has been made of the much greater efforts to combat TB and HIV, while TB has struggled to win support.

TB is estimated to kill nearly 1.5m people a year and is still a major contributor to global mortality. Unlike HIV, TB can easily spread much more quickly than HIV, which is transmitted through sex and blood, whereas TB is spread through the air.

TB is the world’s second biggest killer after heart disease, taking nearly 1.5m lives a year, compared with 2m for HIV. But TB has been outshone by HIV since the 1990s, before it caused a global pandemic.

TB poses risk to workers trying to contain a disease that kills nearly 1.5m people a year, including 480,000 with drug-resistant strains that are particularly difficult to fight and require lengthy treatments.

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Drug takes tough road to market
Simple interventions make a big difference

*Pharmaceuticals*

The route from pipeline to patient is arduous, reports Andrew Jack

When scientists at Janssen (now Johnson & Johnson) began to talk about developments in their new drug, they started to feel like they had found one of the world’s most lethal illnesses — ancient and painful — in a new light.

The drug, called bedaquiline, is being developed by Janssen to treat drug-resistant tuberculosis (TB), which was identified as the second major cause of death by the World Health Organization (WHO) in 2014. The US drug regulator, the Food and Drug Administration (FDA), on Thursday, approved bedaquiline.

The drug is approved for use in patients who have failed at least two previous treatments. It is the first new treatment for drug-resistant TB, which is thought to affect more than 450,000 people each year. Bedaquiline is a promising step towards addressing this critical global health threat.

Bedaquiline is a first-in-class drug that has the potential to revolutionise the treatment of drug-resistant TB. It is a prodrug, which means it is converted into its active form in the body. The drug has been shown to have a high level of activity against drug-resistant TB strains.

Bedaquiline is a promising option for patients who have failed previous treatments and are at risk of developing drug-resistant TB. It is a valuable addition to the treatment options available for drug-resistant TB and has the potential to improve outcomes for patients.

However, bedaquiline is not a cure and must be used in combination with other drugs. It is also associated with some side effects, including skin rash and nausea.

Impacts and challenges

The approval of bedaquiline is an important step towards addressing the global TB epidemic. However, there are still significant challenges to be overcome in order to ensure that the drug is available to those who need it.

First, the cost of the drug is high, which may limit access for some patients. Second, bedaquiline must be used in combination with other drugs, which can complicate treatment and increase the risk of resistance.

Finally, there is a need for further research to better understand the long-term effects of bedaquiline and to improve treatment outcomes for patients.

In summary, the approval of bedaquiline is a significant milestone in the fight against drug-resistant TB. However, there is still much work to be done to ensure that the drug is accessible to all those who need it.
The South African mining industry has for more than 150 years been characterised by a seamy, exploitative and often tragic labour system. In a system that has been described as a 'human rights violation', hundreds of thousands of workers come from remote rural areas of South Africa and beyond – particularly from Mozambique, Lesotho and Swaziland – meaning diverse groups of workers have been brought together to work deep beneath the surface. This migrant labour system has meant workers spend months away from home living near gold, diamond and platinum mines. And it is one of the main reasons the industry's notorious record of HIV and tuberculosis rates have been among the highest in the world.

A critical problem facing companies operating in southern Africa is the health of their workforce. Occupational health programmes are estimated to be between 1,050-1,500 per 100,000 population, which contrasts sharply with a national rate in South Africa of about 1,050 per 100,000, or a global rate of 125 per 100,000 population.

The mining industry has a problem with TB and we need to face it up to and deal with it, says Brian Spicer, chief medical officer at Anglo American, which employs about 175,000 people in South Africa. "We have the problem and have TB and TB programmes that fix the diseases and provide free treatment.

Occupational hazards are not a particular risk of developing TB

The mining industry is one of the few sectors that are proactive in looking for all cases of TB, Spicer says. "They are proactive in looking for all cases of TB and the virus that causes AIDS. when mining, the problems are aggregated because of the enormous number of workers and the huge communities of people around the mines. You see all sorts of demographics and all sorts of problems with workers exposed to silica dust.

Some of TB in the mining industry remains on the correct treatment programmes when they leave their workplaces and their homes. Many mine workers come from rural areas with inadequate health facilities and become TB-invisible once they leave the mines. This means that they can be treated for the disease under the auspices of the National Tuberculosis Programme.

The problem in southern Africa is the mobility of miners, coming and going from a rural area or an adjacent country, moving horizontally and vertically, kind of the blues between the treatment, lost continuity of care, and then the problem recurs and the treatment is not continued. At AngloGold Ashanti, South Africa's biggest gold producer, there has been a 60 per cent drop in the rate of new cases of occupational TB in the past seven years, says James bolsley, the company's medical officer. Yet, it is still estimated that 20-30 per cent of AngloGold's 15,000 employees are HIV positive, with just 20-30 per cent having antiretroviral treatment. New cases of TB at the mining company last year were five per cent of a million. This is below the national average and illustrates that progress is being made.

"When you have the right leadership in place things move and there is a strong, continuous approach to TB in the workplace, but continuity is still an issue," says Spicer. "The mining industry is one of the few sectors that are proactive in looking for all cases of TB.

Austerity poses risk to funding

For years South Africa, was derided for not properly addressing TB, says Spicer. "The mining industry was under the presidency of Thabo Mbeki, who was one of the first to acknowledge that the problem was TB and now we have changed minds. We have seen TB in quite a few countries diminish, there is now a political momentum into action, and we are doing much more in some countries.

The mining industry has for more than 150 years been characterised by a seamy, exploitative and often tragic labour system.
India faces drug resistant strain

Epidemic fears

Health experts are critical of government’s response, says Azam Khan

Mumbai is a breeding ground for the diagnosis of drug-resistant tuberculosis, and the latest cases to rock the city are drug-resistant cases, which experts say are an indication of the battle against the disease being lost. The latest outbreak has come at a time when the government is already facing criticism for its inability to control the spread of the disease across the country. The latest cases, which were reported to the medical journal The Lancet, highlight the government’s failure to control the spread of the disease, which is believed to be responsible for as many as 3,000 deaths every day. The government has been criticized for its inability to control the spread of the disease, and the latest cases are a wake-up call for the government to take action.

In a recent interview with The Lancet, the government acknowledged the problem and said it was working on a plan to tackle it. The government said it was working on a plan to increase the number of diagnostic centres, which are essential for the detection of drug-resistant tuberculosis, and to improve the quality of treatment for those who are affected.

But the experts say that more needs to be done. They say that the government needs to increase the number of diagnostic centres, improve the quality of treatment, and increase the number of treatments available. They say that the government needs to take action now, before it is too late.

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India’s share of drug-resistant tuberculosis (TB) cases is estimated to be around 10 per cent, but the government estimates that the number of cases could be as high as 40 per cent. The government has been criticized for its inability to control the spread of the disease, and the latest cases are a wake-up call for the government to take action. The government needs to increase the number of diagnostic centres, improve the quality of treatment, and increase the number of treatments available. The government needs to take action now, before it is too late.

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