

## **Let's Make TB History**

I visited South Africa earlier this year to learn more about the progress the country is making in the fight against HIV. I toured health clinics, met with doctors and researchers, and listened to the stories of people living with HIV. Again and again, our conversations turned to an often forgotten disease which is HIV's lethal partner: tuberculosis.

Tuberculosis, or TB, is an infection of the lungs that kills about 1.8 million every year, including 400,000 people with HIV and TB. Historically, TB was dubbed "consumption" because it caused such severe weight loss that the disease appeared to "consume" its patients.

Together, HIV and TB form a deadly duo. HIV weakens the immune system, which makes it susceptible to TB infection and much harder for the body to fight the disease. Last year, about one-third of people living with HIV were also infected with TB bacteria, and about 35 percent of deaths among HIV-positive people were due to TB. Worldwide, South Africa has the largest number of people infected with TB and HIV.

Since 2000, better testing and treatment programs have helped drive down TB deaths by more than 20 percent, saving tens of millions of lives. But a new World Health Organization report found that the TB epidemic is larger than previously estimated. New surveillance and survey data revealed hundreds of thousands of new cases, the bulk of them in India. In 2015, there were an estimated 10.4 million new TB cases worldwide, up from 9.6 million cases in 2014. The WHO report also found that of the 10.4 million people with TB, 4.3 million of them did not receive quality care because of significant gaps in testing, treatment, and reporting of TB by health providers. TB deaths climbed to 1.8 million, up from 1.6 million in 2014.

One of the key concerns among health officials fighting TB is the rising threat of drug resistance, something I learned about during a previous visit to South Africa. New strains of the disease have emerged that do not respond to the most commonly used drug treatments available. Treating people with drug-resistant TB is complicated and costly. It also places incredible hardships on the patients who must undergo months of treatment using drugs which are toxic and have serious side-effects.

Last year, Simbongile, a young mother living outside of Cape Town, learned she was infected with drug-resistant TB and started the difficult road to recovery. Her story is heartbreaking, but she is among the lucky ones. In 2015, nearly 600,00 people fell ill from drug resistant TB treatment worldwide. Just 1 in 5 received treatment.

While the impact of drug-resistant TB is a serious problem, the vast majority of TB cases are drug sensitive, meaning they can be cured effectively with medicines so long as they are taken properly. Drug resistance emerges because of incorrect prescriptions by health providers, low-quality drugs, and patients stopping treatment prematurely. That's why the best way to prevent drug resistance is to improve TB testing and treatment programs for drug-sensitive cases.

TB, like so many other diseases, primarily impacts the world's poorest people. If you live in a wealthy country, it might be easy to think, as many people do, that TB is a disease of the past. That fact is reflected in the lack of funding for TB programs around the world. In 2016, global support for TB care and prevention fell \$2 billion short of the \$8.3 billion needed.

Stories like Simbongile's, however, are a powerful reminder that TB is still an active threat and the world is in dire need for new innovations to prevent and treat it. By investing more in research and development, I know it will be possible to create a new generation of TB drugs and develop a new and effective TB vaccine.

TB is not a disease of the past, but if the world works together to fight it, I have no doubt it can be.

*Source: GatesNotes.com*

**Questions 1-10: Write no more than three words AND/OR a number for each question.**

1. The author travelled to South Africa in an attempt to discover the \_\_\_\_\_ that this country is undertaking.
2. A negative impact that was believed to have on TB's patients was extreme \_\_\_\_\_
3. Of the number of casualties among people with HIV, \_\_\_\_\_ had its link back to TB.
4. Due to substantial differences between health services provided different companies, a large number of people with TB did not get access to \_\_\_\_\_

5. Treating people with TB can be complicated and expensive due to the increasing challenge of \_\_\_\_\_
6. When people have drug-resistant TB, they must experience medical intervention leading to \_\_\_\_\_ unexpected consequences.
7. The \_\_\_\_\_ of TB cases can be medically solved by drugs.
8. \_\_\_\_\_ are mainly affected by TB.
9. People fail to make TB a disease of the past because of the \_\_\_\_\_ on a global scale.
10. The author believes that increasing spending on \_\_\_\_\_ will help generate new types of drugs against TB.

## KEYS:

1. Fight against HIV (*I visited South Africa earlier this year to learn more about the progress the country is making in the fight against HIV*)
2. Weight loss (*Historically, TB was dubbed “consumption” because it caused such severe weight loss that the disease appeared to “consume” its patients*)
3. 35 percent (... *and about 35 percent of deaths among HIV-positive people were due to TB*)
4. Quality care (... *4.3 million of them did not receive quality care because of significant gaps in testing...*)
5. Drug resistance (*One of the key concerns among health officials fighting TB is the rising threat of drug resistance ... Treating people with drug-resistant TB is complicated and costly*)
6. Serious (*It also places incredible hardships on the patients who must undergo months of treatment using drugs which are toxic and have serious side-effects*)
7. Vast majority (... *the vast majority of TB cases are drug sensitive, meaning they can be cured effectively with medicines so long as they are taken properly*)
8. World's poorest people (*TB, like so many other diseases, primarily impacts the world's poorest people*)
9. Lack of funding (... *that TB is a disease of the past. That fact is reflected in the lack of funding for TB programs around the world*)
10. Research and development (*By investing more in research and development, I know it will be possible to create a new generation of TB drugs ...*)