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## Perspective

# 'Yes! We can end TB' the theme of the world tuberculosis day 2024: A commitment to fight the oldest known infectious disease from the world

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### ABSTRACT

Tuberculosis is a constant issue related to public health. The disease is highly infectious, and about one-fourth of the global population is presumed to be infected. The efforts for tuberculosis control are in full swing, especially in the endemic countries. The World Tuberculosis Day was celebrated on March 24, 2024; however, the theme of the last year, i.e., 'Yes! We can end TB', was continued for 2024. The theme justifies the commitment of stakeholders and policymakers to a sustained effort to eliminate tuberculosis.

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## 1. Perspective

Tuberculosis is an ancient disease with a history dating back to 9000 years in Atlit Yam, Israel.<sup>1</sup> Disease is a clinical manifestation of the infection caused by *Mycobacterium tuberculosis*.<sup>2</sup> The name "tuberculosis" was first coined by Johann Schonlein in 1834. Phthisis, tabes, and schachepheth were the ancient Greek, Roman, and Hebrew terms for tuberculosis. Because of the victims' pale complexions, tuberculosis was dubbed "the white plague" in the 1700s. Even after Schonlein dubbed it tuberculosis, the 1800s saw tuberculosis being referred to as "consumption." Tuberculosis was also referred to as the "captain of all these men of death" during this period.<sup>1</sup>

*Mycobacterium tuberculosis* belongs to the family *Mycobacteriaceae*.<sup>3</sup> It primarily affects the lungs but can cause infection at extrapulmonary sites.<sup>4</sup> It was discovered by Dr. Robert Koch on March 24, 1882.<sup>1</sup> Tuberculosis is a sizeable contributor to morbidity and mortality.<sup>5</sup> In the year 2022, 10.6 million individuals were diagnosed with tuberculosis, of which 1.3 million met with fatal outcomes.

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Still, the global effort to end tuberculosis has saved 75 million lives since 2000.<sup>6</sup> Although tuberculosis comes in second after coronavirus disease 2019 (COVID-19) in terms of morbidity and mortality, the World Health Organization (WHO) is expecting it to claim the top spot in the near future. This could well be attributed to the pandemic during which the global tuberculosis targets have been disturbed.<sup>2</sup> The global efforts were drastically affected by the COVID-19 pandemic, and still there is a gap in achieving the targets. Tuberculosis elimination by 2030 is one of the Sustainable Development Goals; however, it has become challenging in the aftermath of a pandemic.<sup>7</sup>

One hundred years after the discovery of bacteria, March 24 was declared World TB Day, an occasion to raise public awareness of the global effects of tuberculosis.<sup>1</sup> Like previous years, World TB Day 2024 was celebrated with a commitment to end tuberculosis.<sup>8</sup> After the United Nations high level meeting on September 22, 2023, to accelerate efforts to end tuberculosis, this year's focus is on turning these promises made by the heads of state into tangible actions. The important messages of this meeting are tabulated in Table 1.<sup>6</sup>

**Table 1:** Showing key messages of the United Nations high level meeting on September 22, 2023

High-level leadership and action to end tuberculosis
Sustainable investment of resources, support, care, and information is vital to ensure universal access to tuberculosis care and for research.
Strengthening multisectoral engagement and accountability
Tackling health inequities to ensure health for all

Furthermore, the theme of World TB Day 2024 offers optimism that strong leadership, more funding, and quicker adoption of new WHO guidelines might get things back on track to stop the tuberculosis epidemic.<sup>9</sup>

Also, there is an increased effort to prevent the progression of the latent infection to active tuberculosis by timely administration of tuberculosis preventive treatment, even in contacts with drug-resistant tuberculosis patients.<sup>10</sup> This is based on the fact that individuals infected with tuberculosis (or latent tuberculosis) have a lifetime risk of 5–10% of acquiring tuberculosis disease. And this can go up to 18% annually in certain immunodeficient conditions like human immunodeficiency virus.<sup>2</sup>

In short, the targets to eliminate tuberculosis are dependent on a number of factors. These stresses on the concerted efforts of all the stakeholders targeted at the elimination of tuberculosis. It is worth mentioning that even after 100 years of discovery of the causative organism, there has been a significant delay in the development of effective vaccines.<sup>9</sup> There were only three new drugs introduced for treatment, i.e., bedaquiline, delamanid, and pretomanid in the last decade.<sup>2</sup> The treatment regimens are long associated with a high pill burden and numerous adverse drug reactions. Proper counseling for all tuberculosis patients is also lacking in high-burden countries. Further, the diagnostics need to be improved for less hassle-free techniques like Xpert MTB/RIF and Xpert MTB/RIF Ultra. Oftentimes, the patients are of low socioeconomic groups, like daily wagers, which results in delays for sputum microscopy examinations. Moreover, the stigma associated with the disease is a major contributor to delayed reporting at health facilities, ultimately impacting treatment outcomes. World TB Day aims to create awareness about these issues, and unless these are addressed, it will be difficult to achieve the elimination of tuberculosis. However, it is worth mentioning that countries like India are making significant strides in efforts for a timely diagnosis, treatment initiation, management of adverse drug reactions, and completion of antituberculous treatment. The country aims to eliminate tuberculosis by 2025, which is a difficult but not impossible task.

## 2. Conclusions

A highly focused approach towards the elimination of tuberculosis is the need of the hour. The COVID-19 pandemic has resulted in the derailment of the efforts. However, the aims set by policymakers can be brought on track with the active involvement of all the stakeholders targeted at the elimination of tuberculosis.

## 3. Source of Funding

None.


## 4. Conflict of Interest

None.

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