

**EDITORIAL****Tuberculosis Elimination by 2025 – Is it achievable or overambitious?****Kaushik Patil**

Chief Editor, National Journal of Medical Research

Tuberculosis (TB) has been known in India since the Vedic era, and Hippocrates describes it similarly. Robert Koch discovered the causal bacterium of tuberculosis on March 24, 1882, and hence the disease is also known as "Koch's disease is named after Koch, and the 24th of March is designated as "World Tuberculosis Day."<sup>1</sup>

Nursing Care, Fresh Air, and Good Nutrition are the foundations of TB treatment, which were first outlined in Ayurveda and then adopted by modern medicine as "Sanatoria Treatment." Waksman discovered Streptomycin in 1944, and since then, a few additional medications have been found, the most recent being Rifampicin in the 1980s. Then, after a nearly 40-year hiatus, Bedaquiline and Delamanid reappeared in recent years.<sup>2</sup>

The resurgence of tuberculosis (TB) began in the late 1980s, owing mostly to the Human Immunodeficiency Virus (HIV). In 1993, the World Health Organization (WHO) proclaimed TB a "Global Emergency" due to the global spread of the disease, its link to HIV, and increasing medication resistance. It now shows that the global incidence of tuberculosis is 140 per lakh people, however it is 211 per lakh population in India. The global death rate from tuberculosis is 22 per lakh, with 33 per lakh in India, global HIV TB cases are 14 per lakh, with 6.6 per lakh in India. Multiple Drug Resistance (MDR) or Rifampicin Resistant Tuberculosis (TB) cases are estimated to be 8.1 per lakh globally, and 11 per lakh in India.<sup>3</sup>

About half of the population is infected, and India accounts for one-fourth of worldwide yearly new infections. In India, the prevalence of tuberculosis is 3.2 million individuals, with 2.7 million new cases yearly. This means that more than 6000 people get tuberculosis every day, or more than 4 people every minute! Every year, over 4 lakh 23 thousand individuals die from tuberculosis, equating to thousands of fatalities each day and one kid every day. In India, there are approximately one lakh forty-seven thousand MDR-TB patients. Multidrug-resistant tuberculosis (MDR-TB) affects 6.19 percent of all cases (2.84 percent in new and 11.6 percent in among previously treated).<sup>4</sup>

The first national tuberculosis (TB) programme was established in 1962. The programme was considered a failure after an assessment in 1992 revealed that only 30% of patients were diagnosed and only 30% of those diagnosed were effectively treated. In 1993, the NTEP (Formerly RNTCP) pilot project was born because of these worrying statistics. Following its initial success, the NTEP initiative was expanded in 1997, and on March 24, 2006, the entire country was covered by NTEP. The first National Strategic Plan for TB Control was launched in 2012 with the goal of providing universal access to high-quality TB diagnosis and treatment while also establishing responsibility for results.

In May 2012, the Indian government introduced legislation requiring all healthcare practitioners to report every TB case

detected and/or treated to local authorities. In 2012, the national programme also launched Nikshay, an innovative and forward-thinking computerised recording and reporting system. The launch of Amitabh Bachchan's "TB Harega Desh Jeetega" campaign on March 24, 2015, emphasised the need for public communication. With the launch of the India Vs TB campaign, our country has made significant progress in the fight against tuberculosis.<sup>5</sup>

Our Hon'ble Prime Minister Shri Narendra Modi ji demonstrated the true path ahead by convening the "END TB SUMMIT" in Delhi on March 13th, 2018, alongside Dr Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization.<sup>6</sup>

The revised National Strategic Plan for TB 2017-2025 was finalised by the Ministry of Health and Family Welfare in cooperation with over 150 national and international professionals working in public health and the business sector (NSP).<sup>7</sup>

TB eradication, according to the WHO, is lowering TB cases to fewer than 1 per 10 million people. With this in mind, a picture of a TB-Free India emerges, with zero TB-related fatalities, sickness, or poverty. The purpose of this NSP is to reduce the burden of tuberculosis, morbidity, and mortality while striving for TB eradication in India by 2025. The prerequisites for eliminating tuberculosis have been included into the four strategic pillars of "Detect, Treat, Prevent, and Build" (DTPB).

Over the next five years, active case finding activity (ACF) among vulnerable groups will be a focus, and significant efforts will be made to target these populations. For urban, rural, and tribal communities, priority has been given to vulnerable people for screening and ACF.<sup>8</sup>

Different options for ICT-based treatment adherence support mechanisms have been provided, such as the launch of the Real Time Medication Event Reminder Monitor (RT-MERM) and an automatic pill counter. The 'Nikshay Poshan Yojana,' announced by the Indian government in March 2018, intends to offer TB patients with a monthly incentive of 500 rupees for the length of their treatment for nutritional assistance. It was deployed using an Aadhar-linked smart card that allows for tamper-proof storage of the patient's account and identification. To encourage private sector participation in TB control, every private practitioner is granted a Rs 1000 reward upon completion of therapy that he has notified.

On May 7, 2012, the Indian government designated tuberculosis (TB) to be a notifiable illness. Following its previous policy, the Government of India took a tougher stance on tuberculosis control by publishing a gazette notification on March 16, 2018. Clinical establishments—doctors, laboratories, pharmacists, chemists, and druggists—that fail to notify TB patients will be charged under Sections 269 and

270 of the Indian Penal Code, which carries a jail sentence of six months to two years, a fine, or both, as well as a financial penalty, according to the MOHFW's gazette notification. Following our Honorable Prime Minister's decision to END TB by 2025, the Indian government has taken all necessary actions. Malnutrition, Diabetes, Mellitus, and Drug Resistance, on the other hand, are major obstacles in the END TB campaign.<sup>9</sup>

Polio has been eradicated in our nation. Having brand ambassadors at the state level, involving social, religious, and local leaders in the awareness campaign, involving print and electronic media in spreading awareness, nukkadnataks, distribution of pamphlets, wall writings, folk dance, and other methods to spread awareness in villages and remote areas such as tribal areas have all helped us get closer to our goal of eradication in much less time. We must also apply these lessons in our efforts to eradicate tuberculosis.

On December 30, 2019, the Revised National Tuberculosis Control Program (RNTCP) was renamed the National Tuberculosis Elimination Program (NTEP). This gesture is also in line with the END TB 2025 Mission.<sup>10</sup>

We should all work together to eradicate tuberculosis from India and rid our country of this horrible illness.

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