

The End TB Strategy: Where do we Stand Still in India

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Worldwide, annually millions of people fall sick due to Tuberculosis and it is amongst the top 10 causes of death. The World Health Assembly in 2014 endorsed a new plan called “The End TB strategy” with the vision of a “A world free of TB” with the goal to end the global TB epidemic (< 10 cases per 100,000; reduce deaths due to TB by 95% and emergence of new TB cases by 90% by 2035). India has the highest burden of TB with an estimated incidence of 204 (140 - 281) per 100,000; 2.8 million new TB cases and 0.52 million TB deaths in 2017 [1]. India accounts for nearly 16% of new cases of multidrug-resistant TB (MDR-TB), of which, 8.5% were extensively drug resistant TB (XDR-TB). India alone accounted for approximately 32% of global TB deaths among people without HIV, and 27% of the combined total TB deaths among the people with HIV-positive and HIV-negative [1].

To tackle the problem, the National TB control Program (NTP) was formulated in 1962 which was later revised in 1997 to RNTCP. Government of India started the National Strategic Plan (NSP) 2012 -2017 to have a “TB free India”. Infact, in India between 2016 and 2018, the national funding budget for TB are more than quadrupled, from US\$ 110 million to US\$ 458 million in 2016 and 2018 respectively [2].

To improve access to TB culture and DST, the RNTCP established a network of over 60 laboratories. The Indian government banned antibody-based serological TB tests in 2012 as per the WHO policy to prevent mismanagement of TB patients, but also encourage research to develop newer serological diagnostics [3]. In collaboration with WHO and Foundation for Innovative New Diagnostics (FIND), India has been doing several studies to evaluate and incorporate newly WHO endorsed TB diagnostic modalities such as LED microscopy, Drug Sensitivity Testing (DST), Line Probe Assay (LPA) and Xpert MTB/RIF (GeneXpert). A new cartridge-based technology, Truenat MTB assays® (Molbio Diagnostics, Bangalore, India) has been developed in India which uses a chip based real time PCR assay for the detection rifampicin resistance and Mycobacterium tuberculosis. However, a multicentric study for diagnostic accuracy of the test is still needed [4].

In India, multiple sources of evidence especially in the private sector have shown large underreporting of detected TB cases, India accounts for nearly 26% of the gap in the reporting of TB patients. As per the RNTCP 2017 reports, an estimated 58% of HIV associated TB patients were not reported [2]. To overcome these problems, India has taken up pilot projects in Mehsana, Mumbai and Patna with Private Provider Interface Agencies. With this unique scheme, synchronized by the Clinton Health Access Initiative (CHAI), various TB tests endorsed by WHO (i.e. LPA, Xpert MTB/RIF and liquid cultures) have become more affordable (30 - 50% lower than market price) and accessible to patients in India. This task has been achieved through a networking of more than 90 accredited private hospitals and laboratories [4]. These laboratories notify RNTCP about the confirmed TB cases, and are actively educating the private doctors about the quality-assured TB diagnostics value. This initiative known as the Initiative for Promoting Affordable and Quality TB Tests (IPAQT) has benefitted over 130,000 patients in less than two years.

Since December 2016, Government of India (GOI) in HIV clinics rolled out TB services delivery. There has been an increase in the notification rate (+44% between 2013 and 2017), due to the introduction of national policy of mandatory notification in 2012 and also introducing ‘Nikshay’ a case-based web reporting system. This facilitates the detected case reporting by care providers in the private and public sectors. Cities such as Mumbai have developed their own TB control plans by working with various international and national partners to mobilize community and raise funds. This is an excellent example of local leadership achievement [2].

With the introduction of Programmatic Management of Drug-resistant TB (PMDT) centre in the public sector, MDR-TB treatment is now more accessible. About 20,000 patients only were put on MDR-TB therapy in 2013 but the need is much larger than what PMDT can currently offer. The RNTCP has to invest more resources for the expansion of PMDT, to ensure that all the patients of MDR-TB in India get the proper care they deserve [5].

The newer drugs for the treatment of MDR-TB such as bedaquiline and delamanid are been introduced in the Indian subcontinent but in a phased manner [6]. At the same time, Indian generic pharmaceutical countries are negotiating with global funders to provide drugs at reduced rates. Despite all the efforts, the TB epidemic in India is declining only at the rate of 1.5% per year. This is much slower than that predicted by the mathematical models and at the current rate of TB decline, its elimination by 2050 is impossible.

Preventive therapy for latent TB patients, is still not been considered by the GOI. With the introduction of this, at least two highly vulnerable populations- people living with HIV/AIDs and child contacts under the age of 5 years, would definitely be benefitted. GOI must have to seriously tackle the key factors of TB, especially under nutrition, smoking and poverty which have been clearly linked with TB and TB related mortality [2].

Bibliography

1. WHO. "Global tuberculosis report" (2017).
2. RNTCP. National strategic plan for tuberculosis elimination 2017-2025 (2017).
3. Singh A., *et al.* "Evaluation of 5 Novel protein biomarkers for the rapid diagnosis of pulmonary and extra-pulmonary tuberculosis: preliminary results". *Scientific Reports* 7 (2017): 44121.
4. Lessem E. "The Tuberculosis Diagnostics Pipeline". In Treatment Action Group (2018).
5. RNTCP. "Guidelines on Programmatic Management of Drug-Resistant Tuberculosis in India" (2017).
6. RNTCP. "Guidelines for use of Delamanid in the treatment of drug resistant TB in India" (2018).

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