Active Case Finding in Tuberculosis: Need for a Cautious Approach

The World Health Organization (WHO) data reveal that in the year 2017, 10 million people across the world fell ill with tuberculosis (TB) and 1.6 million died from the disease (including 0.3 million among people with HIV).[1] In the same year, an estimated 1 million children became ill with TB and 2,30,000 children died of TB, prompting the governments across the world to embark on an end TB strategy.[1]

Brief Understanding of Tuberculosis Epidemic

It is being estimated that about a quarter of the world's population has latent TB (one that cannot transmit the disease). However, people infected with TB bacteria have a 5%–15% lifetime risk of falling ill with TB.[1] Therefore, the number likely to suffer from TB in their lifetime is more than a handful. Another cause of concern in the prevention and control of TB is the fact that active TB disease may present with mild symptoms (such as cough, fever, night sweats, or weight loss) for many months, thereby resulting in delays in seeking care by the patient. This group of patients, while not receiving health care will be continuing to transmit bacteria to others (10–15 other people through close contact over the course of a year).

Global Impact of Tuberculosis

In its report, the World Health Organization stated that the largest number of new TB cases in 2017 occurred in South-East Asia and Western Pacific regions. At the same time, 87% of new TB cases occurred in the thirty high TB-burden countries, including India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh, and South Africa.[1]

What Needs to Be Done

It is being estimated that the global fall in the incidence of TB (currently at about 2% per year) needs to accelerate to a 4%–5% annual decline to reach the 2020 milestones of the end TB strategy.[2]

How Do We Do It?

The WHO has outlined three strategic pillars needed to be put in place to effectively end the epidemic. The first strategic pillar is to integrate patient-centered care and prevention.[2] The need for this integration is being realized as, despite marked improvements in the provision of access to high-quality TB services since early 1990, three many people with TB remain undiagnosed or diagnosed only after long delays. Therefore, probably the key to accelerate work on the first strategic pillar of the WHO is to target this high burden of undiagnosed TB, as it sustains transmission. This understanding over last few years has developed into a strong advocacy for using "active case finding" or screening, as a possible complement to the largely "passive case-finding" approach.

Active Case Finding

Models build on experiences from across the world on active case finding (ACF) are being suggested for the application in high-burden countries. Researchers and policy-makers are debating on the experiences gained from TB screening campaigns widely used in Europe and North America in the mid-20th century.[3] Some recent experiences with TB screening in countries with a high burden of the disease are only strengthening this narrative. Probably, it is time we start assessing the role of ACF in TB care and prevention.

India is one such country which has taken up ACF as a part of its Revised National Tuberculosis Control Program (RNTCP).[4] The current practice being followed up in India is ACF in a campaign mode; a provider-initiated activity with the primary objective of detecting TB cases early by ACF in targeted groups and to initiate the treatment promptly. The article highlighting the role of ACF in TB is an outcome of the recent debates on this across the country. The article also raises some concerns which advise cautious optimism in advancing ACF across the country.[5]

Caution

ACF essentially will follow the functioning principles of "Screening" which is a dynamic process. The program (ACF as part of RNTCP) therefore will need to continuously update and prioritize the "at-risk population/groups" as well as the strategy of screening. The benefits are there to see for all; as on one hand, it will generate awareness, and on the second, symptomatic examination will improve significantly.

However, there is a word of caution. As inherent within the principles of screening, there is a need to balance. Indeed, screening specific risk groups have been the part of the *Stop TB strategy* for many years, but mass screening or community screening may still not be advisable. Countries across the world have implemented screening to close the case-detection gap and reduce the delays in the diagnosis, despite mixed results raising some pertinent questions. Finally, every screened case needs to be taken to a logical outcome in terms of modalities of treatment and care without which the success of screening

will remain futile. It is here that countries such as India will need to focus.

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References

1. Tuberculosis (TB). Available from: https://www.who.int/news-room/fact-sheets/detail/tuberculosis. [Last accessed on 2019 Oct 11].
2. World Health Organization. End TB Strategy. Available from: https://www.who.int/tb/post2015 _strategy. [Last accessed on 2019 Oct 11].
3. Systematic Screening for Active Tuberculosis. Available from: https://www.who.int/tb/publications/Final_TB_Screening_guidelines.pd. [Last accessed on 2019 Oct 11].
4. Guidelines: Central TB Division. Available from: https://tbcindia.gov.in/index1.php?lang=1&level=1&sublinkid=4571&lid=3176. [Last accessed on 2019 Oct 11].
5. Singh M, Sagili KD, Tripathy JP, Kishore S, Bahurupi YA, Kumar A, *et al*. Are treatment outcomes of patients with tuberculosis detected by active case finding different from those detected by passive case finding? J Global Infect Dis 2020;12:28-33.

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