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Editorial

Stepping forward for ending tuberculosis in Sri Lanka

Nirupa Chandanie Pallewatte

Deputy Director, National Tuberculosis Control Programme, Ministry of Health, Sri Lanka

Correspondence: ccpnptccd@hotmail.com https://orcid.org/0000-0002-7053-2518

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Tuberculosis (TB) is known to the mankind since ancient times. The earliest evidence of TB in humans was found in skeletal remains of a mother and child buried together in Atlit Yam in Israel 9000 years ago (1). TB had been given different names throughout the history: phthisis, white plague and consumption, a reflection of characteristic features seen in the disease. The term 'tuberculosis' has been introduced in the mid-19th century, derived from the Latin term "tuber" (2).

Tuberculosis had resulted in huge epidemics in 18th and 19th centuries in Europe and North America and caused millions of deaths among people. It was the commonest cause of death among persons in the most productive age group (2). It remains to be a major public health problem around the globe. According to the estimates of the World Health Organization (WHO) in 2019, one fourth of the global population is infected with TB and an estimated 10 million ill with active TB (3). Tuberculosis is more among males than females and children, accounting for 12% of its total case burden. It is also one of the commonest opportunistic infections among patients living with HIV, which is estimated to be 8.2% of TB patients co-infected with HIV (3). TB is among the ten leading causes of death worldwide and the leading cause of death from a single infectious disease (excluding COVID-19 deaths) and in 2019, there were estimated 1.2 million deaths among TB patients (3).

Tuberculosis is a curable disease. With the use of correct drugs and dosage within the correct duration, TB can be completely cured and further spread of the diseases can be prevented. It is worth noting that since 2020, more than 60 million deaths have been prevented with the correct treatment (3).

Tuberculosis is still prevailing in Sri Lanka. Annually on average, 8000-9000 cases are reported to the National Programme for Tuberculosis Control & Chest Diseases (NPTCCD). Such patients are reported from all districts of the country. However, more than 40% of the total case burden is from Western Province and Colombo District accounts for nearly 25% (around 2000) of the total TB cases (4). The effects of urbanization, overcrowding, internal migration for jobs, poverty, unhealthy lifestyles such as alcoholism and smoking may have contributed to the development and spread of TB. Paediatric TB remains low (3% of total case burden) in the country, yet high proportions are reported in districts such as Kandy, Nuwara Eliya and Batticaloa (5). Sri Lanka maintains very low levels of multi-drug resistance forms of TB which reflects the availability of a well-functioning, properly monitored TB control programme. Comorbidity with HIV is also limited to a very few patients (33 patients in 2020). Mandatory screening of HIV patients for TB and TB patients for HIV help to detect and manage coinfection early and reduce the number of deaths.

The country continues to have nearly 85% of treatment success rates throughout the past several years. Despite these achievements, Sri Lanka still faces major challenges in reducing the prevalence, incidence and mortality of TB. Although the loss to follow-up rate has been brought down to very low levels with dedication and commitments of health staff (3.7% in 2019) (5), death rate among TB patients remains high (7.1% in 2019) (5). Old age, comorbidities and delayed diagnosis contribute to this high rate of deaths.

To overcome the challenges and to accelerate the progress of reduction of TB, Sri Lanka has adopted the Global End TB Strategies in 2015. This strategy was designed with a broad vision of "Zero deaths, disease and suffering due to TB" and aimed to end the TB as an epidemic by 2035. The countries are expected to reduce the incidence rate by 90% and absolute number of deaths by 95% from the 2015 baseline values by 2035. The catastrophic cost bared by families affected with TB should be zero during the process towards ending TB (6).

Ending TB is not the responsibility of a single agency or a person. Everybody in the society has a role in the prevention and control of TB. Commitment of political leadership as well the need to end TB as a priority by the government is essential in this regard. Development and spread of TB depends on multiple factors including social and economic determinants. Poor access to diagnostic and treatment services especially in localized settings, poverty, stigma, cultural belief and myths may hinder seeking care for TB. The support from multiple partners including government ministries and institutions such as local government, social services, nongovernmental organizations, civil society and community-based organizations is utmost important in addressing these issues, elimination poverty and empowering the community. Though each stratum of the society is affected by TB, it is seen more among vulnerable populations including people incarceration, and economically and socially marginalized populations. The approaches for ending TB should go hand in hand with promoting and protecting human rights, ethics and equity. Its success depends on the careful planning based on country needs with good monitoring mechanism to assess the progress and take mitigation actions timely.

The current National Strategic Plan (NSP) for TB control for the period of 2021-2025 was developed to address the drawbacks on achieving the targets set for 2020 and already implemented under six main objectives (7). To lower the incidence of TB, control of the spread through early detection and timely treatment is a must. As such, the NPTCCD aims to improve case finding and successfully treat 50 000 cases of TB including 3 000 children during the five-year NSP period (7). Steps were taken to strengthen TB diagnostic facilities by widening the usage of WHO recommended rapid diagnostics island wide and by including both x-ray and sputum examination as initial diagnostic tests facilitating the early diagnosis of drug sensitive and drug resistant TB. The NPTCCD continues to get down WHO qualified, quality assured anti-TB drugs from the Global Drug Facility and ensures that quality drugs are prescribed at consumer level.

The treatment of latent TB infection is one of the key components in reducing the incidence of TB and limiting the spread of the disease. For the first time in history, Sri Lanka has included the management of latent TB as a national policy and its implementation has been in progress island wide since January 2022. The NPTCCD hopes to expand the provision of TB preventive treatment in the coming years and expects to successfully treat, on average 11 600 eligible persons annually (7). Private sector has been identified as the first contact for health services for most of the patients with respiratory diseases. However, significant delays have been observed between the first contact and the diagnosis of TB (7). In this regard, the NPTCCD is aiming to engage the private sector as well in TB diagnosis and care, with a target of improving referral of 30% of the notified TB cases from the private sector (7).

It is of utmost importance that evidence-based approaches are taken in TB diagnosis care and prevention. Special emphasis is given for operational research and the findings to be used for policy decisions on TB control (7). Lack of adequately trained manpower and mal distribution across

districts has hampered the TB control activities in some of the districts. Sustainability of funding is also essential for maintaining the TB services and care. With the improvement of the organization and management facilities with adequate monitoring and evaluation at all levels (7), TB control activities can be revitalized and strengthened. The current COVID-19 epidemic has created a significant impact on the path towards ending TB. Though services are maintained throughout, clinic attendance was reduced tremendously in all districts due to frequent lockdowns and travel restrictions. People having respiratory symptoms were reluctant to seek care due to perceived stigma. Microscopy services were disrupted due to fear of handling sputum samples. Active screening activities were not conducted. As a result, case finding was reduced by 1176 cases in 2020 and bacteriologically confirmed cases by 805 cases when compared 2019 (8). The provision of Directly Observed Therapy (DOT) was also affected resulting in poor drug adherence, late conversion and possible reduction in treatment success. With the reestablishment of the services and efforts taken to sustain the quality services in a sustainable way with adequate infection control, the country is back on track for ending TB. The supportive systems, commitment and dedication of all health care workers, support rendered by the multiple partners in TB care will help to overcome hurdles and make this journey a success.

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