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Strengthening tuberculosis control to advance towards elimination: The 2018 Rev. Port. Pneumol. (RPP) TB Series



Despite the global efforts, that have succeeded in reducing tuberculosis (TB) mortality rate by 37% since 2000, TB was one of the top 10 causes of death worldwide in 2016, the main cause of deaths related to antimicrobial resistance and the leading cause of death among people with HIV.¹

According to WHO report, in 2016, there were an estimated 10.4 million new TB cases worldwide, 10% of which were people living with HIV. An estimated 1.7 million people died from TB, including nearly 400,000 people who were co-infected with HIV. This represents a decrease of 4% from 2015.¹

Multidrug-resistant TB (MDR-TB) remains a public health threat. WHO estimates that there were 490,000 MDR-TB cases.¹

Elimination of TB is not an easy goal. A realistic approach to tuberculosis elimination²⁻⁵ has to rely on the development of innovative diagnostic, treatment and preventive tools. But it will not be possible without a strong political commitment and addressing the socio-economic determinants of the disease.⁶⁻¹²

The aim of this tuberculosis series is to present an update on tuberculosis and provide a framework for future discussions among clinicians for the development of strategies towards tuberculosis elimination.

Despite the evolution in tuberculosis diagnostic tools, we still have several unmet needs – we need diagnostic tests which are more accurate, more rapid, affordable, simple and with the ability to give a same-day result at point of care. We will discuss the diagnostic methods available and the potential impact of potential point of care diagnostics for tuberculosis.¹³ We will then update on the role of the newly developed drugs as well as repurposed drugs.¹⁴

There is a growing consensus on the need to act on the social determinants and co-morbidities of tuberculosis. It will not be enough to act only in diagnostics and treatment. There is a need to identify interventions ensuring social protection and tackling the challenges of urbanization in order

to reduce the risk of exposure, infection and development of disease. $^{15}\,$

To provide proper treatment for MDR-TB cases may be a challenge due to the limited availability of second-line drugs, occurrence of serious adverse events, risk of further resistance.^{3,16-20} We will discuss the available tools to help physicians to manage these difficult cases.²¹

Tuberculosis in children remains a partially neglected topic, and this is why a specific article will present the state-of-the-art management of tuberculosis and latent tuberculosis infection in children.²²

Given the migration crisis a specific article 'making the point' on the migrant and refugee emergency, and on the necessary response of national programmes in terms of prevention, diagnosis and treatment has been included.²³

Finally, given the difficulties of managing NTM we have included a special article on this difficult topic.²⁴

Overall, the path forward for the lowest TB burden countries seems clear: continue to improve surveillance within coordinated national programmes; decrease diagnosis and treatment delay; approach and manage vulnerable populations; promote effective treatment for active TB in order to prevent drug resistance; and increase the impact of preventive actions – screening for latent tuberculosis infection and treatment of those infected. This will not happen without high-level political commitment and continuous medical education of health staff.

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