



Tuberculosis: where are we?

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Tuberculosis is the ninth leading cause of death worldwide and the leading cause of death from a single infectious agent, ranking above HIV/AIDS. The BRICS countries (i.e., Brazil, Russia, India, China, and South Africa) account for 53% of all tuberculosis cases in the world. In 2016, there were an estimated 1.3 million tuberculosis deaths among HIV-negative individuals and an additional 374,000 deaths among HIV-positive individuals. An estimated 10.4 million people (adults, 90%; males, 65%; and people living with HIV, 10%) fell ill with tuberculosis (i.e., were incident cases) in 2016. Drug-resistant tuberculosis is a persistent threat, a total of 490,000 cases of multidrug-resistant tuberculosis having occurred in 2016, with an additional 110,000 cases of rifampin-resistant, isoniazid-susceptible tuberculosis.⁽¹⁾

The World Health Assembly, convened annually by the World Health Organization, passed a resolution approving with full support the new post-2015 Global TB Strategy with its ambitious targets. The strategy is aimed at ending the global tuberculosis epidemic, with targets to reduce tuberculosis deaths by 90% and to cut new cases by 90% between 2015 and 2035.⁽¹⁾

It has been estimated that two thirds of all incident tuberculosis cases worldwide are notified to national tuberculosis control programs and reported to the World Health Organization; strengthening and expansion of the existing network of diagnostic facilities are required in order to guarantee universal access to early and accurate diagnosis of tuberculosis.⁽²⁾

An accurate diagnosis of active tuberculosis is a prerequisite for any successful tuberculosis control program: at the individual level, a patient who has tuberculosis and goes undiagnosed remains infectious to others, being at risk of dying, whereas a patient who does not have tuberculosis and is misdiagnosed as having tuberculosis is unnecessarily exposed to potentially toxic drugs, and scarce public health resources are wasted.⁽³⁾ In addition, only a fraction of the estimated cases of multidrug-resistant tuberculosis have a laboratory-confirmed diagnosis. Adequate capacity to diagnose all cases of drug-resistant tuberculosis is essential to make further progress in global tuberculosis care and control.⁽²⁾ Therefore, the tuberculosis control strategy should ensure provision of services for early diagnosis and proper treatment of all forms of tuberculosis affecting people of all ages.^(2,4) New, safer, affordable, and more effective drugs allowing treatment regimens that are shorter in duration and easier to administer are key to improving treatment outcomes of drug-resistant tuberculosis.⁽⁵⁾

A search of the recent literature reveals one review focusing on tuberculosis treatment and presenting current evidence on this fundamental aspect of tuberculosis control,⁽⁶⁾ as well as a worldwide survey of the current use and acceptability of novel diagnostic tests for active tuberculosis.⁽⁷⁾ In addition to contributing to individual case management, such studies contribute to developing updated local guidelines and local health care policies, especially in countries with a significant burden of the disease, such as Brazil.

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