New evidence of the tuberculosis burden in Asia demands national action

Tuberculosis disease prevalence surveys are showing that the burden of tuberculosis is even more severe in Asia than previously recognised, particularly in the 11 countries that comprise the WHO South-East Asia Region (Bangladesh, Bhutan, Democratic People’s Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste). Indeed, the new data in WHO’s Global Tuberculosis Report 2016 show that tuberculosis rates in several Asian countries are higher than those seen elsewhere, apart from in nations with severe tuberculosis–HIV co-epidemics. An exceptional commitment to action is needed in these countries.

Since 2009 nine high-burden Asian countries have used national population-based surveys to measure the prevalence of bacteriologically confirmed pulmonary tuberculosis in adults and estimate all forms of tuberculosis prevalence across all ages. In four of these surveys, the prevalence of tuberculosis disease was much higher than had been estimated using other sources of data, including case notification, leading to major corrections to national estimates of tuberculosis. India is the most recent nation in the WHO South-East Asia Region to undertake such voluntary revisions of tuberculosis burden estimates. On the basis of evidence from one statewide prevalence survey, better case notification,1 household surveys, studies of tuberculosis drug sales in the private sector, evidence of huge under-notification,2,3 and more accurate national mortality data,4 the Government of India together with WHO has revised national tuberculosis estimates upwards. The 2015 estimate of incident tuberculosis in India is 2·8 million cases,2 which contrasts with the 2014 estimate of 2·2 million incident cases.5 The number of tuberculosis deaths in India in 2015 has now been revised to 480 000, more than double the 2014 estimate of 220 000.5 Importantly, these increases reflect the incorporation of more accurate data, not an increase in rates, with both tuberculosis incidence and mortality decreasing from 2000 to 2015.6 Moreover, the revisions are interim in nature, with further changes likely when India completes its first national tuberculosis prevalence survey in 2017–18.

An even larger revision of estimates was announced in recent years by Indonesia. Indonesia’s national tuberculosis prevalence survey 2013–14 reported a bacteriologically confirmed pulmonary tuberculosis prevalence rate of 759 per 100 000 population in people aged 15 years and older.7 The prevalence rate of all forms of tuberculosis in children and adults was estimated to be 647 per 100 000 population,7 more than double the earlier estimate developed from case-notification data, and comparable to nations with severe tuberculosis–HIV co-epidemics, such as Botswana and Zambia.5

India now accounts for more than a quarter of the global total of incident tuberculosis cases, and more than a third of annual deaths.7 Indonesia accounts for 10% of global incident tuberculosis cases and 7% of worldwide deaths from tuberculosis.1 Several countries in the WHO South-East Asia Region, and others across Asia, have unquestionably high burdens of tuberculosis; in some instances with rates that exceed all but the sub-Saharan African nations with the most severe tuberculosis–HIV co-epidemics.1 Tuberculosis is the leading cause of death from any infectious disease and the highest contributor to disability-adjusted life-years lost among people aged 15–44 years in the region.8 The costs in suffering, premature mortality, impoverishment, and foregone development are incalculable.
Comment

The extent of the challenge, as revealed by the new data, is immense. But it is also true that tuberculosis can be effectively controlled in Asia, given the comparatively low rates of tuberculosis-HIV co-infection and multidrug-resistant tuberculosis in the region.\(^1\) Success is possible, even with the limited methods of tuberculosis control and treatment available. This is shown by progress made globally in tuberculosis control and by better-performing areas in some countries. The goal of ending the tuberculosis epidemic by 2030, as committed to by governments in the Agenda for Sustainable Development, is not wishful thinking, even in the countries with the highest rates of tuberculosis. Together, the southeast Asian countries must implement an intensified approach to tackling this disease, an approach that addresses the scale and complexities of the challenge.

As a first step, these governments could declare tuberculosis control a top priority on national agendas, rather than viewing the ending of tuberculosis as just one among the 169 impact targets set out in the Sustainable Development Goals (SDGs). To meet the WHO End-TB strategy targets, which are aligned with the SDGs, of 90% reduction in tuberculosis deaths and 80% reduction in tuberculosis incidence by 2030,\(^7\) the political commitment should be translated into comprehensive national action plans based on the three pillars of the End-TB Strategy (integrated care and prevention, bold policies and supportive systems, intensified research and innovation).\(^7\) These national plans must be fully funded and implemented promptly by an empowered body that reports to the highest levels of government.\(^7\)

Effective measures for controlling tuberculosis must be massively scaled up. These measures include: comprehensive epidemic control strategies; outpatient, primary care, private sector, and community-based case detection and treatment; adopting new methods for diagnosis, treatment, and prevention; rational use of tuberculosis drugs including adoption of newer drugs and regimens; preventive therapy to those at risk; active case finding; economic support to affected households; and, not least, measures that tackle the biosocial determinants of this disease of poverty, such as overcrowding and malnutrition.\(^3,9\)

The Global Plan to End TB 2016–2020 emphasises that at least 90% of all people who need tuberculosis treatment must be reached, including 90% of people in key populations, and at least 90% treatment success be achieved.\(^10\) Formalisation of these strategies and other initiatives such as roll-out of rapid diagnostics and use of newer drugs into the technical and operational guidelines of India’s National Tuberculosis Control Programme\(^11\) are examples of best practices toward ending tuberculosis. The new data in WHO’s Global Tuberculosis Report 2016\(^6\) establish beyond doubt the high burden of tuberculosis in Asia. This must result in an informed commitment to action, so that in the next years Asia can accelerate progress towards ending tuberculosis.

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