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EDITORIALS

Tuberculosis in India

An ancient enemy just gets stronger

Zarir F Udwadia *consultant physician, P D Hinduja National Hospital and Medical Research Centre, Mumbai, India*, Chapal Mehra *public health specialist, New Delhi, India*

Twenty years ago it was widely believed that India was successfully on its way to controlling its alarming tuberculosis (TB) epidemic. The country's massive scale-up and implementation of directly observed treatment short course (DOTS) therapy under the Revised National Tuberculosis Control Program (RNTCP) was lauded internationally as a global model of excellence.

Yet this represented only half of the story of TB in India. A terrifying picture of the death, devastation, poverty, and suffering caused by TB began to emerge almost two decades later, when it became apparent that TB in India was not just a national crisis but a global one. Each year India has 2.2 million new cases, more than 300 000 deaths, and economic losses of $23bn (£14.9bn; €20.3bn) from TB,[1] making it India's biggest health crisis.

At the heart of this crisis is the failure of India's RNTCP to engage and monitor the country's large and unregulated private sector. This is where most patients with TB seek initial care despite extensive evidence of inaccurate diagnostics and inappropriate treatment.[2] Patients with TB in India typically flit between an unsympathetic public sector and an exploitative private sector[3] until they are too sick or impoverished to do so, all the while continuing to transmit and spread tuberculosis in crowded home and work environments.

In December 2011, doctors from Mumbai reported cases of totally drug resistant TB that posed an extremely difficult challenge to clinicians and public health authorities.[4] In the ensuing glare of public attention the RNTCP revisited its approach to TB control at the national and city level, which led to several policy initiatives.[5] In Mumbai, laboratory and hospital facilities were improved, medical staff and funding increased, access to second line drugs was provided to eligible patients,[6] and TB was finally made a notifiable disease in May 2012.

Despite these positive developments the general perception remains that India's TB programme has failed to control disease and to reach out to poor and marginalised people who need its help most. Considering India's massive TB crisis, the RNTCP's annual budget of Rs 500 crore (£52m; €71m; $80m)[7] remains derisory. The RNTCP spends the least on each TB patient among the BRICS countries (Brazil, Russia, India, China, and South Africa)—$28, compared with $107 in China and $264 in Brazil.[8] Recent reports of further TB budget cuts sparked protests within the government, led by its own officers.[9]

India needs to do much more if it seriously wants to control its TB epidemic. This will require immediate and massive investment in public health infrastructure, particularly new diagnostics and treatment. It also needs to tackle the long neglected social determinants of TB.[10] Most patients with TB still lack access to stable employment, nutrition, decent housing, and high quality healthcare.[11] The dysfunctional relationship between the private and public sectors also needs urgent attention. India must work at providing every TB patient with free and accurate diagnosis and the right treatment, whether in the public or the private sector. When TB is diagnosed, patients and their families must receive counselling, nutrition,[12] and economic support. The programme must treat all patients who have TB, irrespective of their resistance pattern. And India desperately needs new drugs for the growing population of patients with more extreme forms of drug resistant TB, who have nearly exhausted the available first and second line drugs.[13]

A group of experts recently put together recommendations for India's prime minister, urging him to tackle TB as a national emergency. In particular, these experts focused on issues of public awareness, diagnosis, treatment, drug resistance, nutritional support, and private sector engagement. This was a reminder that effective TB control needs more than new strategies: it needs political will and commitment, backed by sufficient resources. Unless this happens, TB will continue to be India's silent epidemic and a death sentence for poor people.

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1 Central TB Division, Government of India. TB India 2014. March 2014. www.tbcindia.nic.in/pdfs/TB%20INDIA%202014.pdf.
2 Udwadia ZF, Pinto LM, Uplekar MW. Tuberculosis management by private practitioners in Mumbai, India: has anything changed in two decades? *PLoS One* 2010;5:e12023.
3 Kapoor SK, Raman AV, Sachdeva KS, Satyanarayana S. How did the TB patients reach DOTS services in Delhi? A study of patient treatment seeking behavior. *PLoS One* 2012;7:e42458.
4 Udwadia ZF, Amale RA, Ajbani KK, Rodrigues C. Totally drug resistant tuberculosis in India. *Clin Infect Dis* 2012;54:579-81.
5 Anand G, McKay B. Awakening to crisis, India plans new push against TB. *Wall Street J* 25 December 2012. www.wsj.com/articles/SB10001424127887324461604578193611711666432.

Correspondence to: zfu@hindujahospital.com

6 Masand P, Iyer M. Mumbai's "hit" tuberculosis model may be replicated across India. *Times of India* 23 August 2012. http://timesofindia.indiatimes.com/city/mumbai/Mumbais-hit-tuberculosis-model-may-be-replicated-across-India/articleshow/15610455.cms.
7 Central TB Division, Government of India. TB India 2014 (p41). March 2014. www.tbcindia.nic.in/pdfs/TB%20INDIA%202014.pdf.
8 Macintyre K, Mwangi B. Expenditure reported by national tuberculosis programs in 22 high burden countries between 2010-2012: what is the Global Fund's contribution? Aidspan: TB expenditure in high burden countries. October 2014. http://aidspan.org/sites/default/files/publications/TB%20Expenditure%20analysis_working%20paper%20Oct2014_0.pdf.
9 Srivastava K. TB epidemic looms large with Rs 2000 crore fund cut, erred policy. *DNA* 10 January 2015. http://bit.ly/1zGYfHd.
10 Hargreaves JR, Boccia D, Evans CA, Adato M, Petticrew M, Porter JD. The social determinants of tuberculosis: from evidence to action. *Am J Public Health* 2011;101:654-62.
11 Oxlade O, Murray M. Tuberculosis and poverty: why are the poor at greater risk in India? *PLoS One* 2012;7:e47533.
12 Bhargava A, Chatterjee M, Jain Y, Chatterjee B, Kataria A, Bhargava M, , et al. Nutritional status of adult patients with pulmonary tuberculosis in rural central India and its association with mortality. *PLoS One* 2013;8:e77979.
13 Iyer M. Government drags feet on "effective" anti-TB drug. *Times of India* 14 October 2014. http://timesofindia.indiatimes.com/india/Government-drags-feet-on-effective-anti-TB-drug/articleshow/44808069.cms.

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