Nora Engel, *Tuberculosis in India—A Case of Innovation and Control*. India: Orient BlackSwan, 2015, 267 pp., ₹595, ISBN: 978-81-25059-61-5 (Hardcover).
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The spectrum of health inequalities does not end at unequal access to healthcare alone, it is also about the unequal distribution of diseases across the globe. Keeping in tune with this cruel inequality (which is very much of our own making), India has the highest number of cases of active tuberculosis (TB) as well as those with drug resistant TB in the world. It is hence obvious that the means to control the disease in such a country will be full of innovative strategies and mechanisms which can serve as prototypes to the rest of the world more so in view of the recent resurgence of the disease globally. Nora Engel's book is a serious attempt at deciphering the various innovative techniques adopted to control the menace of TB in the country. In the words of the author, 'the book explores the dynamics of innovation in TB control in India' (p.1). The book provides comprehensive information on the problem of TB in India and clearly delineates that despite improved diagnostic tests, newer drugs, service processes and so on, the problem continues unabated because the disease is as much a social as it is a medical problem. According to Engel, this makes the ground realities for innovation very complicated (p.7). In a country like India, the problems of retrieval of documentary evidence are well-known and hence it is commendable on part of the author to have written this treatise. A large part of the information for the book is thus collected through interviews, observations, field visits and other such innovative means.

The author identifies TB control as a complex and a multifaceted problem and perceives it as a 'multi-world' phenomena right from the TB bacteria to the national and global policymakers (p. 45). In her analysis of TB control in India, she has correctly identified that though researchers and practitioners do know that their own perspectives (and hence 'worlds') exist but there is little exchange between these worlds. As a practitioner in one of the country's largest public hospital, I see this lack of communication all the time. Lack of communication between these two different 'worlds' of TB in the country is not only disastrous for its control but also impedes the treatment (read clinical) strategies available for curing patients with TB.

The book talks about organisational innovation in TB control in India and cites the creation of a Public Private Matrix (PPM) as a reliable means to achieve this end. India is among the countries with the largest private sector involvement in TB control (p. 67). There has been a paradigm shift of government policy to include new partners in the public sector and hence PPM has suddenly become an important means to provide more efficient control and treatment in TB. The author notes that in the absence of the regulation of private healthcare in the country, innovators developed a model of PPM, which ensures the use of standardised protocols of treating TB. Patient referral to authorised centres providing TB treatment is the basis of this organisational innovation. She extensively describes her visit to Mahaveer Hospital in Hyderabad, which is the most successful example of the PPM model in the country.

Having said this, the author has in detail enumerated the problems which plague the PPM model in TB control (p. 79). She mentions that a lack of trust and belief in the common ground has been identified as the main obstacle to PPM in the healthcare sector. According to the interviews she conducted, the public healthcare workers of TB blame private players for being unregulated, not trustworthy and only interested in profit-making. The private practitioners on the other hand blame public healthcare staff for not paying enough attention to individual patients. It can be easily concluded that although it is imperative that private players cannot be ignored in the treatment and control of TB in India, but the same cannot be considered as a panacea for controlling TB through the length and breadth of the country. The PPM model, howsoever innovative, is the product of the neoliberal policies, which led to the opening of the Indian markets post-1990s. Its success in TB control is not mainly because it was a brilliance of organisational innovation but also because the disease of TB came with another serious ailment—poverty! It was thus not suitable for being owned entirely by the private sector. Private players in India successfully intervene either when the financial stakes involved in treating a disease are high or when there are enough governmental inputs to make profits both financially or otherwise (as has probably been the case with TB). The success of the PPM model for TB in the country is undoubtedly a unique phenomenon (and innovation) but to bank on this model for future guidelines would be suicidal as the dynamics of private practice in India is an ever-changing field with financial lure at the helm of affairs.

In the chapter on Innovation and Control of Strategies (p. 105), the book has dealt in detail with the change in country's policy towards Multi-Drug Resistant

TB (MDR-TB). Despite a high number of MDR-TB cases in the country, the construction of MDR-TB in the country did take some time and thinking. The construction of this narrative is considered by the author as an important innovation in the strategic aspect of TB control in India. The book correctly identifies the attempted 'normalisation' of the problem of MDR-TB in the country. The author feels that by putting a prevalence of 3 per cent to MDR-TB in India (which is much higher than 3 per cent), an attempt is made to bring it at par with the global average and therefore taking away the sense of disaster and threat from its occurrence. The problem of MDR-TB is multifaceted with poor quality of DOTS implementation and neglecting socio-cultural factors in treatment being dominant determinants. In fact, in a recent controversial decision by the government, the drug of choice for treatment of MDR, Bedaquiline, has been rationed and made available in only six hospitals in five cities of the country, a decision which was even critically considered by the Delhi High Court.

The book finally describes the innovations in technology (diagnostics) and innovations in service delivery. There is a lack of focus, coordination and competition in research and development for new diagnostics particularly for MDR-TB (p. 137). The author has correctly mentioned that there is a lack of standardisation in diagnostic tests for MDR-TB particularly for the Indian scenario. For non-MDR-TB cases, there is an over-dependence on sputum examination, a test which has poor sensitivity, and needs experience and skill for interpretation. A 'flexibility of standardisation' approach for diagnostic tests will be helpful in establishing the supremacy of tests in the Indian context. The author believes guidelines alter the local adaptations for service delivery in the Indian context and she is right. Local adaptations of TB control should not be controlled by standardisation alone. In this respect, we need 'situated standardisation' which implies situating standardisation in a specific problem or issue that one faces within the practice of care delivery relevant in the healthcare setting one engages with.

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