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Strengthening Directly Observed Treatment for Tuberculosis in India

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The findings of the Global Tuberculosis report – 2014 has revealed that out of the 9 million people who contracted the tuberculosis (TB) disease in the year 2013 worldwide, India alone accounted for more than one-quarter of the cases [1]. In-fact, India is also in the forefront with respect to drug-resistant TB (DR-TB) cases [1]. The trends clearly suggest that the national stakeholders have failed to accomplish the Millennium Development Goal-6 [1,2].

Directly observed treatment (DOT) strategy has been advocated to improve the treatment outcome [2,3]. In the execution of Directly Observed Treatment (DOT), a DOT provider (trained health worker/ trained community volunteer except family member of the patient) ensures and supports the patient in consuming their drugs throughout the duration of treatment [2,3]. Documented evidence is available to confirm that a major fraction of patients who do not receive DOT, stop their medicine once their symptoms subside [1,2]. This interruption in treatment not only results in the aggravation of the problem of antibiotic resistance, but also facilitates the transmission of DR-TB to their contacts [1,2]. Thus, implementation of DOT strategy is a crucial step in overcoming non-compliance to treatment as it is extremely hard to anticipate patients who will default over the course of their treatment [2,3]. In-fact, research performed in heterogeneous settings has shown that compliance with DOT strategy has resulted in a reduction in the number of cases of microbiologic failure, relapse, and acquired drug resistance; decrease in mortality rates; early detection of adverse effects, drug intolerance; and improvement in the quality of life of the patient and their family members [4-6]. In addition, poor treatment outcomes have been observed in settings where DOT strategy has not been followed [2,7].

One of the national health survey conducted in India showed that close to three-fourth of the nation's population prefers private sector (viz. owing to the inherent flaws in the public health sector like strict timings of government healthcare establishments; geographical inaccessibility of government health care institutes; lack of availability of trained health care providers in remote areas; social stigma associated with the disease; and prevalent myths and misconceptions) for their ailments, owing to which most of them eventually land up in a non-DOT regimen [1,3,7,8].

Realizing the key role of private and non-governmental organizations in augmenting the health indicators of the country, a new scheme has been proposed, in which any DOT provider willing to undertake the initial home visit for address verification, administer treatment, and defaulter retrieval for missed doses will be given an honorarium for every patient who has completed treatment [9]. To further expand the benefits of DOT strategy, the policy makers have suggested to develop a comprehensive streetwise DOT directory; build partnerships with professional organizations/non-governmentalorganization; need-based execution of awareness activities targeted to appropriate audience; sensitization sessions for private medical practitioners to adhere to the diagnostic/treatment guidelines; encouragement of health care providers/community volunteers to become DOT providers; adequate counseling of the patients regarding the nature/duration/need of adherence and completion of treatment; ensuring immediate release of honorarium by the program managers /District Tuberculosis Officers to acknowledge the support of DOT providers towards the program; and ensuring monitoring of the DOT provider and guiding them appropriately [1,2,5,9]. In conclusion, the directly observed treatment in TB ensures long-term adherence to the treatment, and thus can play a significant role in improving the treatment indicators across the country.

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