Letter to Editor

Drug-resistant tuberculosis: Response to More *et al.* (2017)

Dear Editor,

I read with great interest the article by More *et al.* describing the profile of drug-resistant tuberculosis (DR-TB) patients referred to the State TB Training and Demonstration Center, Maharashtra (STDC).^[1] The study reported that most DR-TB were male and below 35 years of age which highlights the enormous threat posed by the increasing burden of DR-TB on India's vast demographic dividend. I have the following queries and request for clarifications on a few key observations from the study.

The researchers have suggested that males who comprised two-third of the study sample were more affected by DR-TB probably due to the much higher prevalence of substance abuse, smoking, and alcohol consumption in them. However, the history of addictions to smoking, alcohol and the quantitative estimation of the extent of their use among the patients was not reported, and hence, such an association cannot be derived from the study data. Moreover, some other studies have reported dissimilar findings. A case-control study by Atre et al. among new cases registered for multidrug-resistant (MDR)-TB treatment initiation in Mumbai observed no significant association between the use of smoking, alcohol and the development of MDR-TB.^[2] Furthermore, in contradiction to the present study, Atre et al. found that the female gender was a significant predictor of MDR-TB during the onset of antitubercular therapy. In the current study, More et al. could have further reported the proportion of male and female TB patients who were diagnosed with MDR-TB at the STDC and evaluated if there was a statistically significant difference between these proportions.

More *et al.* report that the source of treatment for the past episodes of TB was mostly (92.5%) governmental health facilities. The result apparently does not identify patients who received treatment from both government and private health facilities during their past TB treatment. According to one estimate, the private sector diagnoses more than half of Mumbai's estimated 50,000 TB cases annually.^[3] The affordability of nondirectly observed treatment from the private sector can be a major challenge for TB patients from economically disadvantaged backgrounds. Consequently, the oscillation of TB patients from the public to private sector or vice versa in the absence of effective referral systems can delay initiation and sustenance of correct treatment resulting in poor patient outcomes.^[4] The recent declaration of TB as a notifiable disease is targeted toward increasing collaboration and participation of the private sector with the overarching objective of improved programmatic management of DR-TB.^[5] Thereby, it seems unlikely that just 7.5% of DR-TB patients had undergone treatment from the private sector in the past. The researchers also did not report the mean number of episodes of TB in the patients before their diagnosis with DR-TB. Some of the lacunae in this regard could be due to unavailability of data in the records used for analysis in the study. DRTB diagnosis and treatment facilities should, therefore, make a record of such additional variables from patients reporting to them for validating these critical research findings in future studies.

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Conflicts of interest

There are no conflicts of interest.

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