Reviewer’s report

Title: Transforming Tuberculosis (TB) service delivery model in China: Issues and challenges for health workforce

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Reviewer: Nathan O'Hara

Reviewer's report:

The authors used a mixed method approach in three provinces in China at various stages in a transformation towards a new TB service delivery model. Specifically, the authors investigate the impact of the new TB service policy on the supply of TB healthcare workers, the knowledge base of the TB workforce, and the motivation of the workers. The authors concluded that the new service delivery model was associated with fewer health professionals and insufficient financial incentives to attract and motivate high-quality service provision.

I commend the authors are their mixed methods approach. The qualitative research provides excellent context and specific examples of the limitations of the new policy. However, I have several concerns related to the quantitative analysis.

Major Concerns

In my opinion, there are two major limitations to the study. The authors do not provide data on the pre-transformation TB workforce of the Zhejiang and Ningxia provinces. Without this information, we cannot determine whether the deficiencies in TB service delivery are attributable to the new model or have always been present. Secondly, the authors describe the socioeconomic differences between the three provinces. This is mentioned in the limitations section with a caveat that the impact of the provincial differences in minimal due to the mixed methods approach. I am not convinced that a mixed methods approach would necessarily mitigate this limitation and would suggest attempting quantitative adjustments, particularly on the income data. If the Zhejiang province is more economically developed, I would assume the cost of living is higher in the Zhejiang province. Are the higher incomes in this province merely reflecting a cost of living adjustments and have no relation to the TB service delivery policy?

Minor Concerns

Pg 9, lines 145 - 155, More detail should be provided regarding the qualitative methods. Please refer to the COREQ reporting guidelines for qualitative research. http://www.equator-network.org/reporting-guidelines/coreq/

Pg 10, lines 180-184, If possible, please provide detail on the TB prevalence in each province. Are TB staffing levels appropriate for the TB prevalence in those regions?

Pg 15, Line 262-267, One of the study hypotheses was that the new TB service delivery model would be associated with more TB knowledge. As a primary objective of the study, this should be commented on in the opening paragraph of the Discussion. Also, as mentioned under the Major Concerns, can the
authors conclude that the new delivery model is associated with fewer TB health professionals without a comparison to the pre-transformation workforce levels in the region? With pre-transformation data for Zhejiang and Ningxia, the author could make some inferences on the degree to which the TB workforce in these regions is still transforming towards the intended policy objective.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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