Reviewer's report

Title: Determinants of internal migrant health and the healthy migrant effect in South India: a mixed methods study

Version: 0 Date: 18 Apr 2017

Reviewer: Pramod Regmi

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Considering migrants health, both globally and locally in South Asia, this paper is very timely and has certainly added new knowledge in our scientific community. Applying a mix-method, authors have presented data using appropriate statistical tools. The paper is generally well written. However, there are several rooms for improvement before it is accepted for publication. I am surprised not to see any limitation despite this study was carried out in two districts and with labor migrants (mostly from manual workers). Another concern I want to raise here is ethical concern as approval was sought only from external ERB. Authors does not say anything around approval from local ERB. Follow are few points, authors should consider revisiting:

In line 89: please remove AIDS. (AIDS does not transmit). HIV/AIDS now are not written together. If needed, suggested term is HIV and AIDS.

In line 137: provide details about standard threshold of poverty line (e.g. earning less than $...)

In line 149: Add a paragraph about socio-demographics characteristics of qualitative participants (n=66)

In line 151: Who are local partners? Are they NGOs/CBOs working for labour migrants?

In line 160: Explain how the quantitative data was managed/entered (double entered or % of total data double entered) and analysed (e.g. SPSS)?

In line 153: Who are the participants of semi-structured interviews? It is not clear. Please explain this.

In line 164: How many participants involved during piloting tools (you have said 4 households).
In line 200: Does this study not require an ethical approval from local ERB? See http://jme.bmj.com/content/38/7/428

In line 209: Inclusion of minor (14 years). How were they approached? What about ethical consideration while recruiting/interviewing minors in this study?

In line 220: Please elaborate 'connecting tissue' problem (there are examples later on, see line 282—please bring it forward)

In line 329: n=12 is not several. Replace with few participants

In line 337: When you quote statement in '...' this can't be from two people. List only one participant. There are few more quotes similar to this.

In your table 1 and abstract, you have mentioned figure of 1217. For wider reader, please explain in your result section how this figure come from.

I am surprised not see any limitation of this study discussed.

In the background, it is beneficial to add trends of internal migrants in India, e.g., figures from most recent Census of India.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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