Reviewer’s report

Title: Fertility and family planning in Uttar Pradesh, India: major progress and persistent gaps

Version: 0 Date: 28 Jun 2019

Reviewer: Cheng Li

Reviewer's report:

This study focused on the fertility rate and the use of contraceptive methods in UP. The authors use the data from National Population Policy with a great confidence. The authors also aware the limitation of sex preference in fertility differentials. Furthermore, there are still some questions in the text need to be interpreted, as listed below:

1. As the authors mentioned in line 167, the districts were grouped according to NFHS-4 TFR levels. However, I believed the change of TFR in each district you mentioned as follows might be more reasonable when analysis of contraceptive use patterns and trends. I would like to suggested the heat map of change of TFR in each district as figure 4. And the following family planning coverage and trends should also be re-analysis according to the change of TFR rather than TFR in each district.

Minor comments:

1. Although abbreviation has been provided in the end of manuscript, full name still should be provided when it first appeared in the text, eg. TFR in line 115.

2. What is the replacement level mentioned in line 127?

3. In line 156, the authors mentioned that they examined clustering of fertility using NFHS data in 2015-16 and assessed the extent to which district characteristics were associated with fertility. I would like to suggest the authors to provide the detail data or clustering figures in the results to show the district characteristics were associated with fertility.

4. The modern and traditional contraceptive methods should be defined in the part of methods.

5. In figure 1, line chart is more suitable.

6. I fell quite difficult in understanding the figure 5, and I think the authors should provided detailed figure legends rather than a figure title.
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