Reviewer’s report

Title: Urban-rural Disparities in Health Care Utilization among Chinese Adults from 1993 to 2011

Version: 0 Date: 01 Oct 2017

Reviewer: Marc Saez

Reviewer’s report:

The authors try to estimate trends in urban-rural disparities in self-care, and inpatient care utilization from a perspective of the hukou system. However, they have not been successful in achieving their objective. In fact, I have both major and minor comments.

Major comments

1. Although the authors point out among their limitations (lines 45-49), the fact that health-related data, including self-reported health status and some objective indicators are not available for the period 2009-2011 reduces the sample size and, therefore, significantly reduces the power of statistical contrasts. The authors have two options, not necessarily exclusive, to reduce the period analyzed to 1993-2009 or increase the level of significance (up to 10% or 15%, for example), thereby also increasing potency. Better the two options.

2. Since they use multinomial logistic models, the authors should test the independence of irrelevant alternatives (IIA) (Hausman-McFadden test (1984) or the Small-Hsiao test (1985)). In general, when the IIA property does not hold will yield inconsistent parameter estimates and biased forecasts. Authors should provide evidence (tables and graphs) of compliance with this hypothesis and, in the very likely case of non-compliance, use alternative methods (i.e. nested logit model which does not have the IIA property, etc.).

3. Authors should consider interactions between need variables, area and predisposing characteristics (age and sex, in particular).

In any case they should perform some sensitivity analysis that allows interactions to be included in the model.

Minor comments

1. Authors should define CHNS before using it (page 3, line 24).

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.

No

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

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

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.
I declare that I have no competing interests’

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Do you want to get recognition for reviewing this manuscript? Add a record of this review to Publons to track and showcase your reviewing expertise across the world’s journals. Signing up is quick, easy and free!

Yes