Reviewer’s report

Title: Rethinking Disability

Version: 0 Date: 17 Oct 2017

Reviewer: Hannah Kuper

Reviewer's report:

I enjoyed reading this article, which outlines a new approach for measuring disability. I believe that this piece will be of interest to a general readership, as well as those already working on disability-related issues. I have some comments that I hope will help to improve the article further.

The Model Disability Survey can make an important contribution to the literature on disability by helping to generate data to identify where interventions are needed, evaluate the impact of interventions, and monitor progress, as the authors rightly point out. It would be helpful to situate their tool within the wider framework, to give more comprehensive understanding to the non-specialist. For instance, it is not designed for use in a census, and this is where short tools such as the Washington Group Short Set may be valuable. Furthermore, it does not aim to generate impairment specific data that may be needed in developing health programmes, and here blindness and hearing impairment surveys and so on have a role.

In the last page of the main text, it would also be useful to provide a bit more information about the MDS (even as a stand-alone box): how many items does it include and which domains does it specifically measure?

There are certain instances when some more information may be useful, particularly to make the article accessible to the general readership. For instance:

1. Main text, line 7. It may be useful to explain DALYs and what they are.

2. Main text, line 46. It may be useful to give an example here, to make the model more understandable to the lay reader.

There are some minor issues that could also be addressed:

1. Abstract. Describing disability as "etiologically neutral" without further explanation may be confusing to lay readers.

2. Background, line 7, the sentence "There has been a recent global focus on disability as a development issue, but disability is also have a global impact" is not clear to me.

3. Background, line 15. I would argue that it is important to consider disability as well as mortality, not over and above mortality.
4. Background, line 39. While I firmly agree with the authors that disability is a continuum, it may be useful for advocacy to provide estimates of the number of people above a certain threshold.

5. Main text and abstract. It would seem to me that it would be clearer to make the points of disability being a universal human experience and being on a continuum as points 1 and 2, rather than 1 and 3.

6. Main text, page 3, paragraph 1. Are there references to support these points made (i.e. that ADLs and IADLs do not capture mild/moderate decrements in health)?

7. Concluding sentence - this is not very clear to me - I am not sure what point the authors are making.

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

Yes

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

Unable to assess

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.

Not relevant to this manuscript

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