Reviewer’s report


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Reviewer: Marleen Temmerman

Reviewer's report:

This paper is well written, reads well and addresses a very important topic in population health. The authors tried to assess the impact on women's health (life expectancy and mortality) using valid methods that study causality, controlling for poverty and for democracy indexes, and I would like to congratulate them for taking on this challenge and looking for ways to control for the fact that 187 out of 193 countries have ratified CEDAW.

I have however problems with the methodologies used and with the conclusions:

1. The authors discuss ratification of CEDAW which does not imply implementation: some countries translate UN resolutions and guidelines to national policies and practices, others ratify and do not implement at all. Did the authors try to look at implementation rate?

2. Line 119-142: authors state that there are no valid control methods and therefore they used an interrupted-time-series analysis (ITSA). My questions are the following

   - CEDAW has been ratified over more than 20 years; hence could the authors analyse countries that ratified early with as control group late ratifiers in the same political democracy classes?

   - perhaps even better would be to compare male life expectancy and mortality as well in relation to CEDAW ratification. In case the better rates are similar for females and males, the effect of CEDAW on these indicators is probably low/non-existent

3. Conclusions: the authors conclude that the impact of CEDAW ratification is mixed; I would rather state that no conclusions can be made based on this study.

In conclusion: the rationale of the study is really interesting, and I hope that the paper get published after additional analyses as suggested above, or if impossible, after addressing this in the discussion that is rather short now.
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.

No

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

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