Reviewer's report

Title: Geographic information analysis and web-based geoportals to explore malnutrition in Sub-Saharan Africa: A systematic review of approaches

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Reviewer: Sharvari Shukla

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Comments on: ‘Geographic information analysis and web-based geoportals to explore malnutrition in Sub-Saharan Africa: A systematic review of approaches'

The analysis for this manuscript comes from a large systematic literature search from Sub-Saharan Africa based on three digital scientific journal databases: SCOPUS, ISI Web of Science and PubMed. Authors clearly mentioned details in methods section. The authors identified 563 references of which 339 meet the relevant inclusion/exclusion criteria, 62 duplicates were excluded in step 1, and in step II they reviewed 62 manuscripts for abstracts. Eventually, total 16 relevant hits, including nine peer-reviewed papers and seven web-based geo-portals were included.

The purpose of this review was to assess the current state of knowledge regarding the use of geo-information analyses for exploring malnutrition in SSA and then they investigated the establishment of web-based geo-portals for providing freely accessible malnutrition data to a broad community using a snowball approach by hand-searching selected articles.

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Reviewer has no specific comments to make. Looking at the efforts put in literature review which is creditable to authors. The paper is very well-written in Standard English and concise. The article is presented in an intelligible fashion. The analyses appear appropriate. The findings will be of considerable interest to the readership of this journal. The authors are careful to spell out the nature of the study.

However, because the review is based on malnutrition in Sub-Saharan Africa only, there is a need for future funded similar review/research to determine whether the results are generalizable to developing nations like India where malnutrition (over and under nutrition) is increasingly prevalent and concept of using of geo-information analysis in this domain is limited. As in India also, both undernutrition and overnutrition contribute to NCDs and researcher have shows an independent relationship, stronger for foetal growth restriction than preterm, with childhood stunting and wasting across regions, suggesting that child growth and nutritional status may be strongly linked to foetal life and in part prenatal in origin, suggesting a need to intervene during an earlier life stage with the focus on pregnancy nutrition.
This reviewer has no specific comment to make and think that investigators should get chance to publish this work for scientific contribution.

1. Is the question posed by the authors well defined?  
   - Yes
2. Are the methods appropriate and well described?  
   - Yes
3. Are the data sound?  
   - Partly
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?  
   - Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data?  
   - Partly
6. Are limitations of the work clearly stated?
7. Do the authors clearly acknowledge any work upon which they are building both published and unpublished?  
   - Don’t know
8. Do the title and abstract accurately convey what has been found?  
   - Yes
9. Is the writing acceptable?  
   - Yes