Reviewer's report

Title: Public, Environmental, and Occupation Health Research Activity in Arab Countries: Bibliometric, Citation, and Collaboration Analysis

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Reviewer: Christine Urquhart

Reviewer's report:

Major compulsory revisions
APH-submission-comments
The paper is interesting and appears to fill a gap in the literature.
The paper needs careful copyediting throughout.
My main recommendation is that the paper needs some major restructuring.
Much material that justifies the research does not appear until the discussion.

1. I think the following sentences need to be moved to the background or methods section (with some alterations, to suit the earlier placement). The discussion is not the place to bring in extensive coverage of what appears to be new literature. The discussion should refer to the previously mentioned literature, but at present the background does not prepare the reader for the justification for the study. If this causes problems with word limits then some rephrasing will be necessary.

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Before going into details and interpretation of the data, the authors would like to state that this study does not represent 100% of the literature published in the field of public, environmental and occupational health in Arab countries simply because there are some international and regional health journals that are not indexed in ISI web of science. For example, Eastern Mediterranean Health Journal is one of the regional journals in the field of public health in which many Arab researchers did publish; however, documents published in this journal were not counted because it is not indexed in ISI Web of Science. (should be in Methods)

Research collaboration is an important mechanism to improve quality and quantity of national research output [53]. International collaboration can increase the visibility of scientific publication from a particular country [54] (should be in background, as justification for the study)

Arab countries have been the source of some fatal infectious diseases such as Middle East Respiratory Syndrome which was initially diagnosed in KSA. There was an outbreak of polio in Syria that made international agencies to call for ceasefire to accomplish polio vaccination campaign [67]. Another example is the cholera outbreak in Baghdad after the second gulf war [68]. The situation in some Arab countries, like Egypt, Yemen, Tunisia, Syria and Libya created
several health problems and contributed to...Mycobacterium tuberculosis and Staphylococcus aureus and some gram-negative bacilli are developing multiple drug resistance which is a true future public health challenge at regional and global level [94-102]. (This block of text needs to move to the background, as it is part of the justification for the study)

However, several international bibliometric studies in the field of public, environmental and occupational health have been published. One study showed that USA is leading the world in the fields of Preventive Medicine, Occupational/Environmental Medicine and Epidemiology, and the contribution of USA researchers to the field of Public Health is outstanding. On the other hand, less developed world regions are still lagging behind in the field and governments should support researchers in order to improve scientific production and advancement of knowledge in their countries [107]. A second study described a 30-year citation analysis of the Archives of Environmental & Occupational Health (AEOH) Journal and indicated that citation analysis can provide an interesting look at the development of a journal over time and offers a unique insight into the direction of both the journal and the discipline within which it exists [108]. A third study from India indicated that public health research output is increasing in India but the distribution of research topics and the quality of research reports continue to be unsatisfactory and that health policy makers need to address deficits in public health research in order to reduce the very large disease burden in India [109]. Another study from Africa showed regional variation in research output in the field of public health. The authors of the study indicated that this might assist policymakers to facilitate the advancement of public health research in different regions of Africa, and could be useful for international organizations in identifying needs and to allocate research funding [110]. (all this needs to be in the background and probably pruned to allow some space for reflection in the discussion)

2. The methods appear to be satisfactory, although I am not used to seeing the h-index used for countries rather than people. I have come across h-index studies of research teams, but I’m a bit unsure why you used the h-index for countries (apart from the fact that WoS may offer that facility). The common criticism of the h-index is that self-citation can inflate an author’s apparent esteem and productivity. Do the authors have any comments on whether there are problems in using the h-index for countries in this way? Most scientometric evaluations will use several indicators to overcome the problems of using just one indicator. I appreciate that much of the scientometric research is published in journals that may not be easily accessible, but I think you do need some more justification for the use of the h-index in this way.

3. At present the discussion seems to wander from topic to topic and some of this may seem very loosely related to the actual research. The discussion about the coverage of occupational health seems to come out of nowhere – please consider how much this contributes to the paper.
4. The limitations at the end of the discussion might be made a separate section.

5. The conclusion needs to have several key messages – what does this study add to existing bibliometric studies about health and medical research in Arab countries? What are the main messages to policymakers (regarding the promotion of research collaboration, research into tropical diseases, public health concerns of Arab countries)? I think it would be useful – if it is possible – to identify what seems to work in terms of successful collaborations (in terms of visible publishing, at least).

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.