Reviewer’s report

Title: A model for a drug distribution system in rural Australia as a social determinant of health using Event Structure Analysis

Version: 0 Date: 13 Aug 2017

Reviewer: Jo-Anne Brien

Reviewer's report:

Thank you for this review opportunity. This is a very interesting and novel body of work.

This manuscript is of particular interest for two reasons- the utilisation of event structure analysis which does not appear to be widely applied in the health literature, and, the attention being paid to medication access issues in remote Australia.

This is a well written manuscript which clearly outlines this dual purpose. While ESA is briefly introduced, it might be instructive to elaborate further on the implications of selecting this approach, as opposed to other possible approaches. Were there other reasons for this methodological approach being used?

Is this approach to purposefully design a system which is a social determinant of health? (as the title suggests 'A model for a drug distribution system in Outback Australia as a social determinant of health using Event Structure Analysis', or is the core purpose of this work to describe an existing health service in such terms? (and thereby proposing that the drug distribution system be recognised as a social determinant of health, thereby changing how this might be viewed by practitioners, health policy makers et al. The premise that the drug distribution system is a social determination of health has important consequences, if this is new.

For an international audience, terms such as 'outback Australia' might be defined to better distinguish 'rural and remote' terminology. For the purpose of publication is this a lay language, descriptive term or a formal geographic identity. The data quoted for pharmacists distribution among the population (97 pharmacists per 100,000 population in major cities, compared to 60 per cent per 100,000 in remote areas) is an important note, but does not appear to be referenced.

Who is the audience for this paper? There is mention of pharmacy schools- is there an implicit invitation/opportunity for pharmacy schools to be engaged in this area of practice training and development? Is this paper written to health professionals' organisations (pharmacy medical and other health professions), as well as policy makers? Are others likely to be able to be better informed based on this work. It might be possible to draw out the utility of these findings in the discussion/conclusions of this manuscript.
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.

Yes

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.

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