Reviewer’s report

Title: Psychosocial and demographic predictors of adherence and non-adherence to health advice accompanying air quality warning systems: A systematic review

Version: 0 Date: 30 Jun 2017

Reviewer: Melissa Hart

Reviewer's report:

This manuscript provides a review of the psychosocial and demographic factors that influence the adherence to health advise that accompanies an air quality warning. The authors concentrated their review to studies that included participants who were aware of the warning systems, meaning that the overall number of studies included in the review is quite small. However, the studies included, and subsequent analyses undertaken, result in a comprehensive set of findings around the facilitators and barrier to adherence to air quality warning systems that will provide a useful resource to those developing air quality warning systems. My suggestions for revisions are minor and concentrate around clarification of methods, and clarity of language, rather than any suggestions for reanalyses.

Specific comments

* Whilst the manuscript in general is well written, the abstract is quite difficult to read, with long confusing sentences. I suggest a re-write. In particular the conclusion portion does not include any of the important findings of the study, instead it merely states what has been done and how it can be used. Methods- what do you mean by "inception"? Suggest just including the time period covered.

* Page 3, line 3- define WHO

* Ref 1 form the WHO is a report rather than a "news release".

* Page 3, line 12- "In this context…" I find this sentence very difficult to understand. What are you informing the general population of?

* Page 5, line 6- "This systematic review.." are you referring to the current paper or the ref cited above? This sentence does not make it clear. Also the use of "themselves".

* Introduction- It is not made clear that the manuscript is a review until the end of the introduction. This needs to be mentioned earlier.
* The review included studies undertaken over a long period of time. How may this have influenced results?

* Did the method of delivery of the air quality warning influence responses?

* Given most studies included in the review were assessed to have moderate to high biases I would suggest expanding this section to discuss these biases in more detail, and how they may influence results.

* As with the abstract the conclusions section is very short and does not include a summary of the main findings of the research. I suggest this is expanded.

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Please indicate how interesting you found the manuscript:

An article of importance in its field

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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