Reviewer’s report

Title: Prevention of tick bites: an evaluation of a smartphone app

Version: 0 Date: 03 Mar 2017

Reviewer: Kevin Griffith

Reviewer's report:

The paper "Prevention of tick bites: an evaluation of a smartphone app" is an interesting and novel approach to the prevention of tickborne diseases. The research project has potential merit. Nevertheless, as currently designed and presented, it is not acceptable for publication.

The introduction is not well constructed. Much of the information regarding the app is presented in the methods (page 6, line 104 - page 8, line 150). This needs to be better organized and more clearly presented.

The methods/results are not well organized and described. The characterization of an "experimental" and "control" group are misnomers; this is an observational study based on a convenience sample. Additionally, it's not clear if the first questionnaire was designed to collect baseline data or data from early use of the app; a baseline assessment is critical for this study. The study also is lacking a better analysis of the change between surveys. For example, knowledge, self-efficacy and intention are quite high (87%, 96%, and 96%, respectively) among app users in the first questionnaire, so it's not clear how the app is helping this group, especially considering there is no real change between the first and second questionnaire. Also, how the multivariate model was constructed is not described, and it's not clear of the significance/importance since it applies only to questionnaire 1.

I do think the usage information is interesting and pertinent, and I would recommend that this remain in any future drafts of the manuscript.

In the Discussion section under "effects," I disagree with the authors' conclusion that the app is an effective educational tool. As the authors note, there likely is selection bias among those using the app, and their knowledge, self-efficacy and intention were very high in questionnaire 1.
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.

Yes

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

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

Needs some language corrections before being published

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