Reviewer’s report

Title: Development of mass media resources to improve the ability of parents of primary school children in Uganda to assess the trustworthiness of claims about the effects of treatments: a human-centred design approach

Version: 0 Date: 27 Oct 2019

Reviewer: Frederick Morfaw

Reviewer's report:

Abstract

The abstract is well structured overall, providing a good overview of the study.

* The introductory statement in the abstract "There are few evaluated resources for helping the public to critically assess health information" suggests the authors wish to evaluate a resource used in helping the public assess health information. This contradicts the objective of the study stated in the next sentence. We suggest a revision of the two statements to remove the ambiguity.

* The title suggests the resource was design for parents of primary school children, meanwhile the abstract suggests it was developed for the general public, thereby setting some doubts in the minds of the ready. Please clarify.

* In the description of the methods in the abstract, it is unclear what the design of the study was. Did the authors use multiple designs at different stages of the process of developing the mass media resource? We would recommend making this clear in the abstract.

* The authors declare the final version of the podcast was found "useful", suggestive a comparison was done between different users. Was this the case, and did the authors have sufficient evidence to make this declaration? Please clarify.

Background

The authors adequately lay the background of the topic which deals with providing people with adequate tools to enable them assess the trustworthiness of treatment claims.

* We recommend that the following statements be either referenced, or stated in a more cautious manner if they represent the authors' opinion: "Untrustworthy treatment claims and misinformed decisions about treatments result in wasted resources and unnecessary suffering. This is a universal problem, but the consequences are greater in settings where resources are scarce".
* Kindly provide a justification for choosing your focus on low-income countries.

* Within the background the authors describe initial phases of the work. We believe these are parts of the methods and should feature within the methods section.

* The last statement of the introduction states that "This article describes the development of mass media resources designed to enable people to understand and apply the IHC Key Concepts to...." The target audience as mentioned in the title is "parents of primary school children". This is however not mentioned in this introductory section thereby providing a disconnect between the title and the introduction. Please clarify

Methods

Participants

* Research participants at different stages are described in table 1. We however found this table too cumbersome and difficult to follow. We would recommend the authors show study participants in a flow diagram and if necessary, attach the entire table as a supplement.

* Within the participants section, the authors present results (lines 111 to 119). We find these results confusing in the methods section. Please clarify.

* The authors established a "network of 25 Uganda journalists with interest and experience in health reporting....". It is however unclear how this network was established and leaves room for doubt if there were no biases in their selection. Please clarify.

* Between lines 135 and 138 the authors declare "to complement the set of learning-resources we were developing for children in primary schools, we defined our target audience as the parents of primary school children in Uganda" This statement created further doubts in my mind who the target of the resource being developed was. Was it for primary school children, their parents, or the general public as I have initially queried in the abstract? Please clarify.

Design process

* I would recommend describing the design before the study participants in order to ease understanding and provide a better flow of the paper.

* Please kindly provide a justification for not providing a description of the settings where the research occurred.
The authors defined 5 phases of their work and refer us to figure 2. The figure appears more like a table than a figure and not quite easy to follow. It also suggests key concepts were prioritized from start to finish (2013 to 2016). Please clarify.

The text describing the process is a bit confusing given that beyond the first two phases described (lines 156 to 169) I was not sure where the subsequent phases fitted. How can you make this clearer?

Please clarify if the search for relevant literature (lines 158-159) was systematic or random, and the databases that were searched.

Please clarify how idea selection was done (lines 163). What criteria were used and how reliable were they?

Please clarify why members of the research team had to provide feedback (line 184) on the prototype when they were not key stakeholders. This could introduce bias in subsequent content.

The authors describe that they "created new prototypes to be user-tested and the design cycle continued until we came up with a final product" (line 192). The methods section fails to highlight the criteria they used for consensus for the final product. Please clarify.

Results

The results are described in detail which we found very good. However, for clarity and better understanding of the content we would recommend using subheadings in certain sections.

Some of the results could be better expressed within tables than as free text.

Moreover, in many cases the authors discuss their results within the result section which was inappropriate. We recommend limiting discussions within the result section and shifting these to the discussion section.

Idea generation and exploratory prototypes

* We recommend the authors provide the reasons for and against the radio program within a single table.

* For the feedback received on the prototypes, we equally recommend that the authors cite the major feedback within the text and put the details under each subheading within a table. Who were those who provided this feedback?

Version 1. The Health choices radio program

* We recommend consistency in the spelling to the word "program" vs "programme"
* Line 304, the authors mention user testing of the first prototype without mentioning those on whom this was done. Please clarify.

* Line 306 - 307, the authors mention that several problems were identified with the prototype. There is no mention within the methods section the criteria for identifying these problems and those involved. Was this from the research team members only or key stakeholders as well? Please clarify.

* In line 324, the authors equally mentioned "user testing" without making it clear who the users were. Please specify the users.

* Line 345, the authors mentioned the research team prioritized 9 key concepts. I think it is important that the authors provide a clear justification why they did not get the input of the parents or other key stakeholders on what key concepts to prioritize. Their list may not have addressed the needs of the target population and introduced their own inherent biases. This is a major concern for me that needs to be carefully addressed.

Version 2, The IHC podcast

* We recommend summarizing the other changes made (line 385) into a table or a box.

Discussion

The discussion focuses on highlighting some of the issues or considerations that arose while developing the resources which is appropriate given the nature of the research.

* My major concern is on usefulness as initially mentioned in the abstract review. The authors do not show how they assessed usefulness in order to declare that the work was found increasingly useful.

* Moreover, their overall conclusion that "the podcast was seen as a useful tool that could empower people..." (line 463) cannot be justified based on the results presented and seems more of the inherent biases of the authors. How would you address this?

Level of interest
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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None

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Were you mentored through this peer review?

No