Author’s response to reviews

Title: Socio-cultural contextual factors that contribute to the uptake of a mobile health intervention to enhance maternal health care in rural Senegal

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Author’s response to reviews:
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Dear Dr Yaya and BMC Reproductive Health,

Please find below my point by point response to the Reviews of my manuscript REPH-D-19-00124R1 submitted on May 22 2019 and returned to me shortly thereafter on June 6. My responses are in blue text below. Thank you for your editorial direction earlier this month via email. Please do not hesitate to contact me if you have any questions.

Sincerely, Dr. M MacDonald

Reviewer reports:

Reviewer #1: Commendable work

Reviewer #2: REPH-D-19-00124R1: Socio-cultural contextual factors that contribute to the uptake of a mobile health intervention to enhance maternal health care in rural Senegal. Most of the comments I made have been given appropriate responses. However, there remain some important methodological issues that must be addressed before the manuscript could be considered suitable for publication.
INTRODUCTION

1] References have been added to support most claims, but they must be provided to support all claims (e.g., p.3, line 34).

- This has been done. See Refs # 6 and 7 referring to statement made on pg 3 line 21-26. See also Ref # 9 referring to statement made on pg 3 line 30-32.

METHODS

2] The response to my question: "What did the analysis actually entail? The paper only refers to "careful reading and re-reading" need to be expanded. What did "coding" actually entail? What were "codes" and how were they defined?

- See below

3] Similarly, the response to my question: "What procedures were followed to ensure rigour? Was there any validation of the analysis?" is insufficient. It appears that there were no efforts to validate any of the analysis.

- The Methods section has been elaborated to better describe ethnography as a method and to respond to the Reviewer’s questions with regard to the process of analysis, coding, and validation. I thank the reviewer for pressing me to make ethnography as a method more legible to readers and to explain in greater detail the process of analysis, including a reference [30]. See page 6, lines 9 to 24. (Latest changes in red in paragraph below).

- I have also provided several references for health researchers who may be unfamiliar with ethnography as a method. See ref 20 (Reeves and Kuper 2008) on pg 5 line 30 and ref 22 (Storeng and Mishra 2014) on pg 5 line 31.

- “Data analysis involved careful reading and coding of the transcripts and field notes in order ensure familiarity with the data. Codes were developed in relation to the broad objectives of the research and refined inductively in the initial reading of the data by the first author while applying interpretive anthropological analysis [25, 26, 27] informed by critical medical
anthropology theory [28, 29]. For example, the initial code “Care Group” was refined into several sub-codes including “early pregnancy disclosure within Care Group” because the analysis of informants’ statements and field observations indicated the critical importance of the Care Group in facilitating early pregnancy disclosure. Saturation was achieved as broad themes emerged from the coding process followed by deeper nuance and insights related to those codes. Preliminary analysis was validated in meetings between the first and second author. Ethnography as a method provides opportunities for informal participant feedback throughout the research which contributes to the validation of preliminary findings and alerts the researcher to unexplored themes. Preliminary findings were also presented and validated at a series of participant feedback meetings in the health districts of Tambacounda and Zinguinchor and with Africare personnel in Dakar, a process intended to increase the “trustworthiness” and applicability of the research findings [30]. Five key elements were identified that together shape the use of CommCare in the context of Africare’s maternal health work in Senegal.”

Alongside the lack of evidence to support many claims - reference could be made to extracts from field notes if there are no suitable quotes from interviews - the lack of validation of analyses means that the reader is expected to accept many statements on faith. I am not questioning the honesty of the researcher: I am trying to protect the researcher from attacks of this type from those critical of the specific methods and/or the general methodology.

- I have added further data in the form of direct quotes and descriptive statements, the details of which are as follows:

Under the section Convening Women: The Care Group, I have added a lengthy quote from a Health Care Provider reflecting on the ‘results’ he has seen in communities with Care Groups. See page 7 lines 36-45.

Under the section Enabling Pregnancy Disclosure, I have added two quotes: one from NGO staff reflecting on the mechanism by which women signal to others within the Care Group that they are pregnant (pg 8 line 27-29) and another from a Care group meeting (pg 8 line 46 through to pg 9 line 4). I have also added a summarizing sentence that reiterates the fact that the mechanism for enabling pregnancy disclosure relies on the Care group (pg 8 line 42-44).
Under the section Harnessing the authority of older women, I have added a brief statement from a health care provider to an already a robust section with quotes from NGO staff, Care Group participant, and a long descriptive section of a Care Group meeting. See pg 9 line 13 for the additional quote.

Under the section Constituting authoritative knowledge I have added a lengthy quote from the head of the community health committee reflecting on his shifting views of the function and importance of the Care Group in his village. See page 10 lines 35-44. I also added a quote from an Africare team member on pg 11 lines 2-6.

Under the section Adding value to community health workers, I have added a descriptive sentence about how midwives train matrones themselves and develop rapport and mutual understanding. See pg 11 line 31-36 with reference to field note (FN) date. I have also added a brief statement from a head Nurse (pg 12 line 9-10) and a lengthy quote from a Health Care Provider reflecting on a particular incident in which the work of a matrone making a referral helped avert a dangerous situation. See p 12 lines 14-20. I have also added a sentence with references to reiterate here that the Ministry of Health and Social Action officially recognizes the matrone as an important player at the community level. See pg 13, lines 7-9.

RESULTS

4] As stated clearly in my initial review, the results should not begin with a conclusion based on findings that are yet to be presented.

- After seeking advice from the Editor of REPH, this has been left as is.

5] Expanding on a point made about the methods (above), I will repeat that it is very odd for some themes to be presented with absolutely no supporting evidence in the form of quotes, and I would also note that reference could be made to extracts from field notes if there are no suitable quotes from interviews.

- See point 3 above detailing placement of additional data.
6] As noted in my original review, much of the paragraph after the first quote in the section "Convening women ..." is a description of the programme that belongs in the introduction. It is not a finding of the study.

- After seeking advice from the Editor of REPH, who agreed it was acceptable, this paragraph has been left as is because it orients the reader to the information about to be presented and also introduces an important concept, that of “the assemblage”

DISCUSSION

7] The response to my request to include some discussion of similarities and differences between the different groups was met with a response about not quantifying results. This misses the point: it is possible to explore the presence or absence of themes - and their apparent importance to people - without quantifying them.

- I have responded to this question in the conclusion with the addition of this paragraph which highlights the diversity of vantage points rather than the differences of opinion between respondent groups. See pg 15 line 9-15.

“There was a diversity of vantage points across respondent groups. Though some midwives, nurses and Africare staff who worked closely with communities expressed frustration from time to time about matrones who lost cell phones or failed to learn how to use them quickly, and though some matrones and Care Groups complained they needed more support, all were in broad agreement about the value and potential of the CommCare intervention. There was also broad agreement across respondent groups about the socio-cultural factors that inhibited women’s uptake of ANC and assisted deliveries and therefore an appreciation of the ways that CommCare was socially embedded within the workings of the Care Group and matrone in a hands-on way.”

8] I noted that quotes longer than two lines should be presented separately from the main text, and although the author expressed a willingness to comply with the journal style, the quote I identified has not been presented in this way.

- Presentation of the quote mentioned has been changed. See pg 14, lines 13-16.
Reviewer #3: Thank you for giving me the opportunity again to look at this paper. While several points improved, I now realise that there is a disconnect between what the introduction, research question and discussion which is focused on eHealth and the results presented which focus on the social innovation that had been initiated alongside the eHealth innovation. The results presented very little (if ever) embark to anything what is eHealth. It is the social innovation that was implemented at the same time together with the eHealth intervention is not really described, nor put as a key aim to evaluate. Although the authors also say that eHealth solutions need to implement and reviewed together with the social innovation, I feel it is then wrong to brand the study as eHealth as this obscure finding.

- The comments from Reviewer #3 are not clear. The Reviewer mistakenly refers to the article as being about eHealth when it is about mHealth. The Reviewer erroneously states that the article has not been presented as being about the socio-cultural context of this particular mHealth intervention when this is made clear in the title, the Abstract, the Introduction and throughout the article. The reviewer also erroneously refers to the socio-cultural factors identified by the research as “social innovations” a term deliberately not used because several key factors are existing social norms and practices that cannot be considered “social innovations”. The comments from Reviewer # 3 contain a number of confusing sentences such as “The results presented very little (if ever) embark to anything what is eHealth” to which we could not respond.

The discussion section starts now with limitations, while it should start with a summary of results. I also do not think that my point of the many interviews is addressed (the sampling strategy is not described, and no argument why what has been done), and then the discussion even mentions focus group discussions, which are not mentioned earlier.

- I have moved the limitations paragraph to the end of the Discussion section. See pg 14 line 32-40.

Reviewer #5: The authors have satisfactorily responded to my comments. The revised manuscript can be published if there are no concerns from the editor.