Reviewer’s report

Title: A study protocol for an mHealth, multi-centre randomized control trial to promote use of postpartum contraception amongst rural women in Punjab, Pakistan

Version: 0 Date: 17 Jan 2019

Reviewer: Michael T. Quinn

Reviewer’s report:

This manuscript presents a proposes study protocol designed to test, in a randomized control trial, the impact of interactive telephone-based counseling vs. voice and text messaging vs. no intervention control on uptake of postpartum contraception, breastfeeding, newborn immunization, and delivery in a health facility or by skilled health professional. The study messaging and measures will be based on the Integrated Behavior Model, an expansion of the Theory of Planned Behavior. The authors substantiate the need for improved postnatal care, along with the feasibility and widespread use of cell phones among the target population. Study setting and inclusion and exclusion criteria are clearly articulated. The proposed sample size is well-justified, and statistical methods are appropriate.

Weaknesses to the proposal include limited information related process and outcome measurement. Specifically, it was noted that all messaging will be tailored to stage of change for family planning adoption, but without explanation of how stage will be assessed, when, and with what frequency. The authors also report that interactive counseling telephone calls will be audio-recorded and used during analysis, but without explanation of how those data will be analyzed. Also, it was noted that a Lady Health Worker program will be operating simultaneously with this study, but with no attempt to assess the potentially confounding effect of study subjects’ exposure to this Lady Health Worker program. Moreover, the proposal reports plans to assess family planning awareness, maternal and newborn health knowledge, perceived norms, myths and misconceptions, positive attitude, and personal agency, but does not specify how these constructs will be measured or report on any psychometric properties of the measures. A more minor criticism is that acronyms used throughout the manuscript are not spelled out when first used, with most being articulated only in a table of acronyms provided at the end of the manuscript.

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.

Unable to assess

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.

Not relevant to this manuscript

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