Reviewer's report

Title: Illawarra Born cross generational health study: feasibility of a multi-generational birth cohort study

Version: 0 Date: 11 Jul 2018

Reviewer: Margo Barr

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The article type is provided as 'research' however the way that it has been written is in the format of a protocol and therefore does not have a results section and impacts on how informative the article is. The manuscript either needs to be re-written as a protocol, with no results or include results if written as a pilot study research article. This would be the preferred option. However, as a research article it would be expected to include pilot results both about the participants and the pilot metadata to inform the processes for the overall study ie duration of each of the visits, time to complete the questionnaires, assessments, biological samples etc; missing data.

Specific question about the Pilot study that are not clear - If there are 2500 births per year in the recruitment hospital, why did the recruitment period need to be so long (8 months) to contact 116 women and recruit 41 women to the study as it would be expected that 1600 births would occur in that period.

Comments about the current version of the manuscript.

Background

The background would benefit from having more structure and focus. Specifically stating why the larger study (Illawarra Born) is needed for which this pilot was conducted. Beginning the section on ease of recruitment rather than information gaps would strengthen the background. The purpose of the pilot as stated line 144 is good however the article does not provide much information on the outcomes of the pilot study as promised in this statement. The background section includes numerous statements that should be referenced such as the sentence at line 74, 75, 95, 97, 106, 109, 112, 113, 114, 218, 162, 165.

Methods/Design

The methods section would benefit from the inclusion of a process diagram, for clarity and substantially reduce the amount of text. See an example from the French longitudinal study from birth at https://www.ined.fr/en/everything_about_population/demographic-facts-sheets/focus-on/French-longitudinal-study-from-birth-an-unprecedented-look-at-child-learning-in-the-first-year-of-elementary-school/. Also the existing two recruitment and outcome figures could easily be combined.
The methods section would also benefit from having sub headings as per the instructions to authors of:

* Aim, design and setting
* Sample frame and inclusion and exclusion criteria
* Recruitment and data collection timeline and processes
* Planned analysis and evaluation

The methods section should also be limited to methods so statement such as at line 256 are not required. What is required is factual information in what information is provided to the participants re their involvement in the study.

The statement at line 267 should be included as part of the design which includes that fact that health reports are not provided to the participants.

The resource information (line 273) if included should be part of the results section. Resources with regard to their impact on the conduct of overall study and how it informs the data collection etc need to be included in the conclusion and discussion.

The results of the exit online questionnaire (from line 284) should be in the results section. The impact of the feedback on the overall study and how it informs the data collection etc needs to be included in the conclusion and Discussion.

Results

A results section is required and should include sub headings that align with the purpose of the pilot study ie (i) Instrument finalisations (ii) determining statistical power for data collection (iii) evaluating the participant acceptability and (iv) evaluating recruitment and data collection processes.

As stated above I would have expected this section to include summaries of the data collected; examination of missing data; timings of visits; assessments etc as well as summaries of the feedback provided by participants and lessons learnt.

The discussion and conclusion section would then concentrate on how the main study will be modified based on the pilot.

Discussion

The discussion should not include any new information but rather a discussion of what is included in the methods and results. Therefore, the discussion regarding ethics approval and the delays is not appropriate without ethics approval being included in the methods and results (which should be the case). If you want to discuss partnership and staffing issues in the discussion information about what was done and what the results were need to be included in the appropriate sections.
The statement on p293 has not been demonstrated in the current manuscript.

The sampling bias (line 306) as the profile of the pilot participants is not provided. The burden on the participants and their extended family (from line 308) is also not provided (other than number of visits). I would have expected information on average times per visit, per task etc to be provided.

The information about the collection and processing of the biological samples (line 316 onwards) should have been included in the methods section and then just discussed in this section.

The discussion should include reference to other similar studies and how your finding may be of relevance to them and/or their issuers were similar.

Conclusion

How exactly did the findings assist in prioritising and finalising the hypotheses for the main study (statement beginning on line 340).

Note
I have not checked that the references are correct and or all referenced in the manuscript.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Not suitable for publication unless extensively edited
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