Reviewer's report

Title: Gastro-oesophageal reflux: A mixed methods study of infants admitted to hospital in the first 12 months following birth in NSW (2000-2011)

Version: 1 Date: 10 May 2017

Reviewer: Madalynn Neu

Reviewer's report:

The authors have addressed most of the concerns of the reviewers. I do not have a concern about validating the diagnosis of GERD in young infants because pediatric providers so often prescribe anti-reflux drugs based on parent report of symptoms addressed in this paper. I do have some remaining concerns.

My biggest concern is the inclusion of microbiome (caesarean section/antibiotics) into the theory based on what was found in this study. Reception of antibiotic in these infants was not mentioned as a finding, so is apparently speculation. The mention of tube feeding on pg 13, line 37/38 and pg 14, line 8 also was not a finding of this study. The microbiome thought is interesting, but needs to be stated more as a speculation, with future research examining tube feeding and antibiotics etc. as influences on the microbiome of these infants.

Pg 9, line 23-25. Please explain how the qualitative data collected in Phase 3 was used to inform the questions for the staff focus groups in Phase 3.

Pg 9 lines 35-39. I do not understand the first three sentences in the Results section, Phase 1. Please clarify.

Pg 15, line 20. Antibiotic use was not a finding of this study. I also do not see the relevance of lines 23-27 in relation to findings of this study. There are other mentions of antibiotics in this section. Again, it can be discussed in terms of speculation, but not as a direct result of your study.

Be careful in the Discussion to separate findings from this study with speculation for all topics.

In Table 3 why Is "vaginally delivered" in the table instead of Caesarean section when C-section is the basis for inclusion of microbiome in the theory?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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:
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.