Author's response to reviews

Title: Perception of caregivers about health and nutritional problems and feeding practices of infants: a qualitative study on exclusive breast-feeding in Kwale, Kenya

Authors:

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Version: 3 Date: 25 January 2013

Author's response to reviews: see over
Point-by-point response to the concerns (the reviewer: Dr. Laura C Altobelli)

Reviewer's report

Title: Why is exclusive breastfeeding easy to preach but difficult to practice in Kwale, Kenya? : Perception on health and nutritional problems and feeding practices of children

Version: 2 Date: 2 November 2012
Reviewer: Laura C Altobelli

Reviewers report:

1. Is the question posed by the authors well defined?
   This is an exploratory study of indigenous perceptions and beliefs of infant illness and care seeking behaviors, which affect infant feeding practices. This approach to the question of infant feeding behaviors appears to be biased to a presumed cause and effect of the former (illness and health seeking) being causal to the latter (exclusivity of breastfeeding).
   
   [Response]
   The factors affecting the practice of exclusive breastfeeding are complex, and a qualitative, cross-sectional study such as this one is not an appropriate design or method for examining the causal relationship among the factors affecting the practice. In response to this concern, I have revised the misleading title of the old manuscript to one that represents the content more appropriately. In addition, “explanatory model,” an ethnomedical term, has been amended more clearly to “an ethnomedical explanatory model for mothers who do not practice exclusive breastfeeding.” Finally, I have indicated in the new “Limitations” section that this study does not examine a causal relationship between mothers’ perceptions of illness and health seeking and the practice of exclusive breastfeeding.

2. Are the methods appropriate and well described?
   One short paragraph is used to describe the methodology. “Standard qualitative research methodology” was reportedly, but the methods are not referenced and we don’t really know what methods were used. The interviewers are not identified. It is not reported why the researchers decided to interview 32 mothers, nor how those mothers were selected. No description of basic socio-demographic characteristics of interviewees is included.
   
   [Response]
   I have described in more detail the methods used in the study and provided references.
3. Are the data sound?
There are not data reported on the focus of the study reported, as the study is purely qualitative. The only data presented is on a supplementary table on the association between prevalence of anemia and parasitic disease, which is not relevant to the issue being reported on.

[Response]
More vignettes and interview data from the informants have been added to illustrate the qualitative data that were analyzed and interpreted. The presentation of the data analysis from direct observation (Table 6 in the old version) has also been revised to support the interview data that show mothers' perceptions about giving food and drink other than breast milk to their infants before the age of 6 months.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
No opinion, as relevant data is not reported, only qualitative assessments.
[Response]
Please see the above response to comment 3.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
No, because the researchers report that “insufficient milk syndrome” is the major factor identified by mothers as the reason for stopping exclusive breastfeeding, but they conclude that other reasons are more important causes (child illness) and do not investigate the reasons for the insufficient milk syndrome, which is fully discussed in other literature that is not cited in this paper.

[Response]
The Discussion section has been revised to provide further details about perceived insufficient breast milk and references to previous studies on the issue have been provided.

6. Are limitations of the work clearly stated?
No limitations are stated.
[Response]
A “Limitations” section has been added, and this addresses some of the concerns raised by Dr. Altobelli.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Other work is cited.

[Response]
More references about insufficient milk syndrome have been added.

8. Do the title and abstract accurately convey what has been found?
I felt that the study title, as well as the conclusions, suggest that it is important for health providers to consider social and cultural factors when designing educational messages to convince mothers to breastfeed. However, the study methodology was more focused on maternal beliefs and practices, and less so on beliefs and practices of health providers who need to orient their messages to maternal beliefs. In other research, it is found that health providers frequently hold the same beliefs as mothers, since they haven’t been taught otherwise, therefore they are unable to develop convincing arguments to change maternal behavior toward exclusive breastfeeding. In short, there seems to be a disconnect between the title, the research methods and findings, and the conclusions. Also the issue of insufficient milk syndrome is referred to but is not taken seriously as a causal factor in this research.

[Response]
The title of the manuscript has been revised to more appropriately reflect what the study examined—mainly mothers’ perceptions and practices regarding breast-feeding. It is true that the perceptions and practices of the health providers have not been examined, although they also play an important role in affecting mothers’ behavior. This issue has now been addressed in the “Limitations” section in the revised manuscript. Moreover, the discussion of insufficient milk syndrome has been amplified using the data and information analyzed in the study; this reflects less of an emphasis on mothers’ perceptions of child illness in relation to feeding practices, which was presented in the previous version of the manuscript.

9. Is the writing acceptable?
Yes
Level of interest: An article of limited interest
Quality of written English: Not suitable for publication unless extensively edited
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.
Point-by-point response to the concerns (the reviewer: Dr. Susana Matias)

Reviewer's report

Title: Why is exclusive breastfeeding easy to preach but difficult to practice in Kwale, Kenya? : Perception on health and nutritional problems and feeding practices of children

Version: 2 Date: 14 November 2012

Reviewer: Susana Matias

Reviewer's report:

This is an interesting manuscript that describes the application of qualitative methods to provide answers for the low rates of exclusive breastfeeding observed in Kenya. This is an important research question, given the potential of exclusive breastfeeding to reduce infant mortality, particularly in developing countries.

Below are some specific suggestions that could help to improve the manuscript.

Major Compulsory Revisions:

1. As part of the ‘Design’ section, the authors need to describe the data collection techniques in more detail. For example, an explanation of the procedures or instructions given for the free-listing and ranking exercises needs to be included.

   [Response]

   A sub-section “Data collection and analysis” has been added to detail sampling, data collection procedures, and so on.

2. Also, make sure that any description of the data collection methods is described in the ‘Design’ section: currently some of these descriptions are given under ‘Data analysis’, for example the anthropometric measurements and lab tests are briefly described in that section, and the goal of the free-listing exercise is also stated under ‘Data analysis’.

   [Response]

   I have revised the “Design” section and included the sub-section “Data collection and analysis” (see above). Anthropometric measurement and lab tests have been completely removed from the Background, Design and Results sections, since one of the reviewers pointed out that they were not relevant to the issue.

3. Under ‘Design’: It would be very informative to describe in more detail (maybe with examples) how the triangulation of data was done.

   [Response]
An example of the triangulation was added in “Data collection and analysis,” e.g., I have added details about some information from key informant interviews and indicated that free-listing was confirmed by the data collectors through 24-hour recall and observation.

4. Under ‘Results’: A description of the sample is needed. The reader needs to know who these people were to have a better idea to whom these findings could be applied to. Even though this qualitative study included a small sample, the reader needs to know the sample, as any study is conducted with the expectation of using its results to benefit a larger population.

[Response]
Characteristics of the sample are presented in Table 1 and described in the text.

5. The prevalences listed under ‘Overall nutritional status of the children in Kwale’ in the ‘Results’ section do not match the information in Table 1 (including its footnote). Please verify and correct any calculations.

[Response]
As indicated above, the sections relating to child nutritional status through anthropometric measurements and lab tests have been removed.

6. Inclusion of more vignettes from the participants would inform the reader about how the authors analyzed and interpret these qualitative data.

[Response]
More quotations from the key informant interviews and vignettes have been added.

7. Under ‘Discussion’: The ethnomedical explanatory model provides an interesting interpretation of the results. However, unless the knowledge of the value of exclusive breastfeeding was also explored, the statement connecting both should be reworded. Based on the results presented there is no support for such interpretation. If knowledge of the value of exclusive breastfeeding was explored please include the procedures used and the findings.

[Response]
The point is well taken. Most informants had heard of the merits of exclusive breast-feeding and indicated this during the key informant interviews. However, having heard of these merits and being convinced of them are very different issues. I have included in the text the question of how long informants gave breast milk (only and with complementary food), which was asked in the key informant interview. I have also added that informants said that food and drink other than breast milk were given
during the first 6 months when breast milk was thought insufficient.

8. No limitations of the study have been listed under ‘Conclusions’.

   [Response]
   A “Limitations” section has now been added.

Minor Essential Revisions:
1. In the Abstract, under ‘Methods’ it is not clear to whom the n=32 refers to. Please revise the wording.

   [Response]
   In the Abstract, n=32 refers to the caregivers including mothers, grandmothers, and husbands. The Methods section now includes additional information, and the summary of the method in the Abstract has been revised accordingly.

2. In the last sentence in the ‘Background’ section, consider revising the verb used (“ensure”).

   [Response]
   The last sentence has been deleted, and the implications of the study results for program implementation at the community level are discussed in the Conclusions.

3. Spell out the acronym HDSS the first time it is used (in section ‘Ethical approval’), and use the acronym from there on.

   [Response]
   The abbreviation HDSS has been spelled out in the “Study site” section of Methods, where it is used for the first time in the revised version of the text.

4. Under ‘Design’, correct the subscripts used (the ones in the text do not match those at the end of the manuscript).

   [Response]
   Both subscripts have been removed. The first one was automatically deleted following revisions to the main text. The second one has been removed at the suggestion of another reviewer.

5. Correct the acronym in the ‘Acknowledgement’ sentence.

   [Response]
   This has now been corrected to HDSS.
Discretionary Revisions:
1. Consider describing under ‘Results’ the information linking child’s age and kinds of food and drink given (table 6). Basically, from the ages and numbers who were exclusive breastfeeding vs. no an expected trend is observed.

[Response]
Table 6 has been revised in accordance with this suggestion.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
I declare that I have no competing interests.
Point-by-point response to the concerns  (the reviewer: Dr. Xiaodong Cai)

Reviewer's report

Title: Why is exclusive breastfeeding easy to preach but difficult to practice in Kwale, Kenya? : Perception on health and nutritional problems and feeding practices of children

Version: 2 Date: 9 November 2012
Reviewer: Xiaodong Cai

Reviewer's report:

General comments

The current study qualitatively investigated potential causes of failure to feed infants under six months exclusively with breast milk in Kwale, Kenya. Introduction was clear. Methods were proper and the findings were supported by data. The study provided critical insight into the knowledge, attitude and behavior around the issue of breastfeeding and could be used in designing intervention programs and up-scaled to a larger geographic area if applicable.

The version I received from the editorial office doesn’t have line number or page number in the print out so I will try my best to be specific in identifying where the issues apply.

Major Compulsory Revisions

1. It seemed that this study was an integral part of a larger “Child Cohort Study in HDSS” and quoted findings in the larger study, such as undernutrition prevalence and prevalence of a number of communicable diseases such as malaria, parasite infection and HIV. Were the methodology and results of these prevalence estimates published elsewhere? I understand that they are not the aim of this study and it is ok NOT to describe the methods for assessing the prevalence (e.g. sampling, measurement and calculation, etc.) but proper reference need to be given so as to validate the quoted figures. If not published yet, the authors still need to mention that these are unpublished results so readers can take the face value of the estimates with discretion.

   【Response】

   The findings in the larger study quoted in the manuscript, such as those related to undernutrition, have not yet been published. Another reviewer, Dr. Laura C Altobelli, has pointed out that the data (Table 1) are not relevant to the issue being reported. I have therefore deleted this section altogether.

2. Another related issue in methodology is subject selection. How were the 30
informants for free-listing and ranking and 28 households for direct observation selected? Were they merely convenience samples or systematically selected random samples? Since there was no parametric estimates out of the analysis, sample selection method actually didn’t matter but still provide relevant information for result interpretation and generalization. One descriptive sentence in the Methods section would suffice, probably in the Design subsection.

Response
I have added the subsection of “Data collection and analysis” under “Methods” to describe how the informants for free-listing, ranking, and household direct observation were selected. It was purposive sampling for key informant interviews and convenient sampling for free-listing, ranking and observation.

3. A minor but general issue throughout the manuscript is written English. The manuscript could benefit from some editorial assistance in grammar and citation formatting. I will specify in the next part of the review below, where applicable.

Response
I have had the English of the entire manuscript, including the Abstract, checked by the professional editorial service Edanz.

4. 1st and 2nd sentences in Background
There has been a more recent updated to reference [1] quoted here, which stated that 53% of all child deaths can be attributed to undernutrition. In the 2008 Lancet Child Survival series, this figure has been revised to “up to one third” of all child deaths attributable to undernutrition.

Response
I have changed that sentence according to an updated figure that was cited in the first of a series of five articles in Lancet, vol. 371, Jan. 19: Maternal and child undernutrition are the underlying cause of 3.5 million deaths—35% of the disease burden in children younger than 5 years.

5. 2nd sentence in 2nd paragraph of Background
Reference [14] and [15] are not the PRIMARY source for the estimates of stunting and underweight prevalence. Those came from the Demographic and Health Survey (DHS) 2006. In addition, there has been a “new” DHS in Kenya (2008 – 2009) with updated estimates. Please use those instead. The same comment also applies to the next sentence where exclusive breastfeeding rate
was quoted. It might also be useful to contrast exclusive breastfeeding in Kenya against regional and global trends, to provide some contextual background.

[Response]
I made a mistake when referring to the UNDP Web site (reference 14). The primary source for the stunting, underweight, and exclusive breastfeeding figures was actually DHS 2008–2009, which had partially incorrect figures. I have now inserted the correct figures and put DHS 2008–2009 as the reference (I deleted the old reference 14. Reference 13 in the revised manuscript, Kenya DHS 2008–2009, has been put into proper reference style). I have also included additional information on global trends of exclusive breastfeeding against which the Kenyan situation is contrasted in “Background”.

6. 1st sentence in 2nd paragraph in Discussion
“The ethnomedical explanatory model suggests that rather than a lack of knowledge in caregivers about the value of exclusive breastfeeding, it is the mothers’ perception of insufficient breast milk and babies’ ill health that results in the use of food and drink other than breast milk.” The current study didn’t show that caregivers were aware of the value of exclusive breastfeeding. Did mothers really know about the benefits of breast milk in increasing immunity against infectious diseases? Lack of knowledge actually cannot be ruled out here. Indeed the value of the current study doesn’t rely on ruling out the lack-of-knowledge factor. Suggest revise the statement as follows:
“The ethnomedical explanatory model suggests that mothers’ perception of insufficient breast milk and the babies’ ill health resulted in the use of food and drink other than breast milk.”

[Response]
The point is well taken, and the sentence has been revised in accordance with your suggestion. There is no evidence that mothers were aware of the value of exclusive breastfeeding, though most of the mothers, other caregivers, and traditional practitioners interviewed claimed to know the merits of exclusive breast-feeding and tended to respond that babies should be exclusively breast-fed until the age of 6 months old. However, having heard of these benefits and being able to provide the answer that was expected of them by the program are different from having sufficient knowledge about the situation and being convinced of the benefits such that they would change their behavior.
Minor Essential Revisions

1. 6th line in Design sub-section
   The footnote here about vital events and data collection is unnecessary. The manuscript reads better without it.
   
   [Response]
   The footnote has been deleted.

2. 6th line in the 2nd paragraph in Design
   “there was 30 informants in each …” Replace “was” with “were”.
   
   [Response]
   “was” has been replaced with “were”.

3. 10th line same paragraph
   The footnote here about direct observation is unnecessary. I found it confusing. The manuscript reads better without it.
   
   [Response]
   The footnote has been deleted.

4. Entire 1st paragraph in Results
   Prevalence estimates from household surveys should not be listed with more than one decimal point. Please round up. In addition, as mentioned in the “General comments”, methodology of these estimates was not given in this manuscript and was probably published elsewhere. Please give proper citation (if published or separately described elsewhere).
   
   [Response]
   As mentioned in the response to your previous comment (Major Compulsory revisions 1), the results of the larger study have not yet been published and they have been completely deleted from the manuscript.

5. Last paragraph in the 1st “Local etiology for feeding baby other than breast milk”
   The quoted example here doesn’t support the etiology of “insufficient breast milk” (as the first quoted example does). It should be removed together with the two sentences preceding the quote.
   
   [Response]
   I have removed “insufficient breast milk” and added a new section under local etiology: “A child needs more than breast milk to grow big and healthy.”
6. In the middle of the 1st paragraph in the 2nd “Local etiology for feeding baby other than breast milk” (this paragraph spans two pages and the issue is on the 2nd page)

The phrase “a baby that was not used to breast-milk, worms in the stomach, or evil eye, including dzongo” is an orphan phrase that doesn’t connect with or complete any sentence. Please revise or remove.

   [Response]

   That phrase has been revised to indicate that it is perceived as a natural process during the healing of the umbilical cord. Not being used to breast milk, having worms in the stomach, and evil eye are also perceived causes of stomachache and abdominal colic.

7. 3rd sentence in Discussion

   References [20] through [24] were given, after which there is “([9] [10]”. These two additional references don’t seem relevant here. Was this a typo?

   [Response]

   That was a typo, and it has been corrected.

8. 1st sentence in the last paragraph in Discussion

   “The prevailing taboo in sub-Saharan Africa …” Is there a reference to this statement?

   [Response]

   That statement was from the reference 34 in the revised manuscript (27 in the previous one). It has been moved from the last sentence to a more appropriate place—at the end of the first sentence of the paragraph.

Discretionary Revisions

   Another thought on “Discussion”

   I understand that Kwale was selected for its higher-than-average child mortality and endemic diseases such as malaria, schistosomiasis, filariasis, HIV and TB. I wonder if the identified factors that contributed to lack of exclusive breastfeeding would apply to other regions in Kenya. If so, a couple of sentences in Discussion would raise the significance (and policy implications) of the current to a higher level.

   [Response]

   I added details in the “Limitations” section to touch upon the significance and relevance
of these findings to other areas in Kenya with relatively high child mortality, though generalizability is a major limitation owing to the small sample.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:
I declare that I have no competing interests.