Author's response to reviews

Title: Clean delivery practices in rural northern Ghana: A qualitative study of community and provider knowledge, attitudes, and beliefs systems

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Author's response to reviews:

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Dear Dr. Patel:

We were pleased to receive your thoughtful reviews to our manuscript, “Clean Delivery Practices in Rural Northern Ghana: A Qualitative Study of Community and Provider Knowledge Attitudes, and Beliefs Systems.” We have revised the manuscript pursuant to the suggested reviews, as illustrated below:

Reviewer 1
Minor Essential Revisions
1. Additional background data needed on the overall prevalence of home delivery versus hospital versus TBA in this sample? Prevalence of neonatal infection in this population? This will help strengthen the rationale, context.

Response:

Paragraph 3 of the introduction was revised to include the following statement:

This is especially critical in the Upper East Region of northern Ghana, where 27% of deliveries were attended by a relative or other untrained assistant, 22% of deliveries were attended by traditional birth attendants (TBAs), and only 35% were attended by nurses, midwives or physicians (the remaining deliveries were
unattended or attended by community health officers). (GSS, 2008) In addition, nearly half of births occur at home. (GSS, 2009)

Paragraph 2 of the introduction includes the following statement:

“Current estimates from the Navrongo Demographic Surveillance System (NDSS) suggest that infections are responsible for at least 20% of early neonatal deaths (newborn death within the first seven days) in the district. (Engmann et al., Trop Med Int Health 2012).”

Unfortunately, data are not available to assess the prevalence of overall infection that does not lead to death.

2. Table of Demographic Characteristics did not come through/print?

Response:

This manuscript used qualitative methodology that involved in-depth interviews and focus groups conducted to be as anonymous as possible. Demographic data on respondents was not collected to ensure maintenance of confidentiality in a small community where demographic information could be easily used to identify respondents post-hoc.

3. Would recommend reviewing some of the literature from Nepal on Birth Practices by TBAs in the community

Response:

TBA practices in developing countries is an enormous area of the literature ripe for further exploration. Given space limitations, it is difficult to summarize this literature in a meaningful way. However, the following text was added to the manuscript:

Our results also complement research conducted outside Africa. For example, Sreeramareddy et al. (2006) found that in Nepal, only 16.2% of mothers who delivered at home used a clean home delivery kit, only 38.3% of the birth attendants had washed their hands prior to delivery, and nearly 94% of infants were given a bath shortly after birth. (Sreeramareddy et al., 2006) As seen in Table 1, our finding regarding non-sterile substances being applied to the cord is not uncommon in the developing world. Mustard oil was applied to the cord in 22.1% of deliveries in Nepal. (Sreeramareddy et al., 2006)

4. In addition to reporting frequency of bathing, authors should clarify recommended timing of first bath after delivery. Delayed bathing is a WHO recommended practice as part of newborn thermal care and should be addressed. Was bathing done immediately post delivery? Or after a few days?

Response:

The following text was added on Page 18:
“Data also suggested inconsistencies with regard to when the babies were bathed. Some mentioned bathing infants shortly after delivery, while others mentioned waiting until later in the day to bathe. None described waiting more than a few hours before bathing.”

5. Clarify FGS were community heads male/female? Were men included in any of the IDIs or FGDs? How does the role of men in the community affect current and future practices?

Response:

The traditional leadership structure in Northern Ghana is male dominated thus community leaders, heads of household, and compound heads were male. This results in our data presenting a very strong male perspective. In addition, we interviewed women’s group leaders who function as spokespersons for women. The discussion of gender in prenatal and perinatal care is the subject of a separate manuscript we are working on and thus did not include such analyses here. We have clarified this by adding the following text.

“All women with newborn infants, traditional birth attendants, midwives, and grandmothers were female, however the majority of community leaders, traditional healers, compound heads, and heads of household were male.”

Discretionary Revisions

1. In addition to breastfeeding practices authors may want to discuss practice of feeding colostrum. In many cultures this is often discarded as it is seen as “dirty” however it has significant benefits for newborns. Practices in Ghana around feeding colostrum would be of interest.

Response:

We agree. The topic of infant nutrition and breastfeeding – including feeding colostrum – is the subject of an additional manuscript. The data on this subject are extremely rich and we felt it would not do justice to the complexity of the issue to include it here.

2. The role of grandmothers was well discussed. How strong is the role of mothers-in-law in this community? How does this influence newborn practices?

Response:

The grandmother is most often the mother-in-law, rather than the mother’s mother. The infant’s mother usually stays with the husband’s family (including the husband’s mother in northern Ghana). The following text was added to the manuscript on Page 12:

In this community, ‘grandmothers’ most often referred to mothers-in-law, rather than the mother’s mother. The majority of grandmothers interviewed discussed events that occurred with their son’s wife and children.
3. Are safe birthing kits available in this community? Authors may want to discuss the use of birth kits that facilitate clean delivery if applicable in this community.

Response:

Safe birthing kits that facilitate clean delivery are used by skilled birth attendants who attend facility–based deliveries in this community. Currently, less than 50% of deliveries in rural northern Ghana are attended by a skilled birth attendant or facility-based (GSS 2009). To the extent that facility-based delivery occurs, safe birthing kits are used.

4. Some more thinking about how these results will be used to influence future program design in Ghana would be of interest to wider audiences. Will this information be used to inform programs? Policies? Both?

Response:

Thank you. We have added the following text on Page 24:

The results presented here provide an important backdrop against which future interventions can be planned. Newborn-care interventions are not new – the NewHints Trial in central Ghana (Hill et al, 2010), Nepal’s Safe Delivery Incentive Programme (SDIP) (Powell-Jackson et al., 2009), and the Pregnancy and Village Outreach Tibet (PAVOT) program (Dickerson et al, 2010) are just a few examples of programmatic attempts to improve the way infants are handled upon delivery. However, our results suggest that future interventions would benefit from thoughtful inclusion of grandmothers and other key community figures in addition to training traditional birth attendants and others who might attend home deliveries. Our results suggest that grandmothers play a critical role in infant care and must not be overlooked as important stakeholders with regard to infant care. In addition, our results uncover a notable disconnect between providers and community members – one that must be breached if future interventions are going to be successful.

Reviewer 2:

Comment 1: With the figures in table 3:-. Apparently 25/35 women knew that something had been put on the umbilical cord and 4 knew that nothing had been applied, that is 29 positive responses. In the lower part of the table there were only 27 responses are entered. This needs to be amended.

Response:

Thank you. The table shows that 35 women answered either yes (25) /no (4)/ don’t know (6) to a close-ended question about whether anything was put on the cord. Of those 35, 27 responded to a follow-up open-ended question that asked what was put on the cord. Note that 4 indicated “nothing” had been put on the cord, similar to the previous question. That means that of the 25 who said “yes” that something was put on the cord, 2 of them did not specify what was put on the cord. The following text was added to the table:
What was put on the umbilical cord?
(27 out of 35 provided a response)

Comment 2: Page 5 of is missing in the phrase "...over 40% of under 5 mortality..."
Response:
This was corrected.

Comment 3: Page 7 "purposively" should be "purposely"
Response:
This was corrected.

Comment 4: Page 10 with needs to be added into the phrase '...provide the team with an opportunity..."
Response:
This was corrected.

Thank you again for your and your reviewers' thoughtful feedback on this manuscript. As a reiteration, neither the manuscript, nor the data it contains, have been published elsewhere or are under consideration elsewhere. All listed authors have contributed significantly to the manuscript and have approved the final version of the manuscript. The authors have no conflict of interest to disclose. Also please note that 6 of the 9 authors are Ghanaian researchers.

Thank you, and please let us know if there is more that we can do to ensure you have everything you need.

Regards,

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