Author's response to reviews

Title: Survival of neonates in rural Southern Tanzania: Does the place of delivery matter?

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Author's response to reviews: see over
Dear editor,

Thank you for the comments from reviewers, all are very relevant and useful for improving our manuscript. We would like to address the comments from the reviewers and general guideline as follows:

Guideline

- Contact details for authors in the submission system: Please kindly remove authors' titles.  
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- Title page: Please include a title page in the manuscript file. This should contain; Title, Author list, Affiliations (department names, institution name, street name, city, zip code, country), email addresses. The author list and email addresses must be identical in the manuscript file and on the submission system, and it must be clear which affiliation pertains to each author. This should be the first page of the manuscript and the abstract should be in a separate one.  
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- Abstract: Keywords are not required for BMC series journals.  
  - The keywords have been deleted from the abstract- see the track changes manuscript

- Ethics: Experimental research reported in the manuscript must have been performed with the approval of an appropriate ethics committee. Research carried out on humans must be in compliance with the Helsinki Declaration (http://www.wma.net/e/policy/b3.htm), and any experimental research on animals must follow internationally recognized guidelines. A statement to this effect must appear in the Methods section of the manuscript, including the name of the body which gave approval, with a reference number where appropriate.  
  - This is data collected from the surveillance system that was set up for a specific study in 1996. Verbal consent is sought for all interviews. Has been stated in the revised manuscript.

- Competing interests: Please include a ‘Competing interests’ section after the Conclusions. If there are none to declare, please write ‘The authors declare that they have no competing interests’. Please check the instructions for authors on the journal website for a full list of questions to consider when writing your competing interests statement.  
  - This has been included, see the manuscript with the track changes

- Authors' contributions sections: In order to give appropriate credit to each author of a paper, the individual contributions of authors to the manuscript should be specified in this section.  
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Addressing reviewer comments

Reviewer's report

Title: Survival of neonates in rural Southern Tanzania: Does the place of delivery matter?

Version: 1 Date: 12 September 2011

Reviewer: Jacobus Vander Velden

Reviewer's report:

Reviewer 2

A nice descriptive article with societal impact around which I have the following
questions:

-is continuum of care introduced in the area of study yes or no? Not comprehensively

-if evidence suggests that survival rates are better in the institutionalized Deliveries why are you performing this study? I miss the arguments.

We do not suggest that survival rates are better in the institutionalized deliveries.

The argument is on page 11 of this manuscript “Neonatal mortality for health facility singleton deliveries in 2005 was 32.3 per 1000 live births while for those born in the community it was 29.7 per 1000 live births. The risk of dying among neonates born in the health facilities was as high as for those born in the community [adjusted RR=0.99 (95% CI: 0.58 - 1.70)]. In 2007 neonatal mortality rates were 33.2 and 27.0 per 1,000 live births for those born in health facilities and in the community respectively. Neonates born in health facilities were at a slightly higher, but statistically insignificant risk of dying [adjusted RR=1.18(95% CI: 0.76 - 1.85)]. We found no evidence to suggest that delivery in health facilities is protective to the newborns”

-is there a risk selection system in place: I mean low risk deliveries in community- And high risks in hospitals?

- Generally all pregnant women are encouraged to deliver in health facilities but a special emphasis is directed to those with predetermined high risks such as high parity, multiple pregnancies etc. Antenatal cards of this group of women are marked with a red star that alerts traditional birth attendants that they should not attend that delivery but refer to women to health facilities. However, compliance is not 100% (example, 38% of twins were delivered in the community- a proportion similar to the singleton (40%). This argument has been added in the revised manuscript

-how is the quality of data in the surveillance scheme guaranteed? – all household in the surveillances area are visited in every four months collecting information on; births, deaths, pregnancies, marital status and migrations. All pregnancies are followed up for outcome. This ensures the completeness in early death reporting. Quality assurance in the field includes re-interviews, accompanied interviews and surprise visits. All forms are checked before forwarding them for processing. Data processing is done using Household Registration System (HRS), the system is with inbuilt consistence checks, and any discrepancy are returned back to field for verification. This has been included in the revised manuscript

-I miss information on nutritional status of the pregnant women and their children? Yes, this is not available much as it is important for the survival of the child and in particular a determinant of birth weight. We have included lack of birth weight data as a limitation. BW has been added as a limitation in the revised manuscript

-careful interpretation of conclusions is difficult as lot of information is not
Available for there viewer(as stated in final paragraph...)

-why both level of education and socio-economic status in the tables, one of

These would be enough!  We included education of the mother following its well known contribution to child survival, the association can be independent of the household economic status. On the other hand, household economic status can influence care seeking as determined by ability to pay.

Reviewer 1

Reviewer's report

Title: Survival of neonates in rural Southern Tanzania: Does the place of delivery matter?

Version: 1 Date: 16 September 2011

Reviewer: Tarek Meguid

Reviewer's report:

Major Compulsory Revision

The major problem I have with this study is that it presents two cohorts of neonates for three consecutive years, that have survived pregnancy and delivery, one born in a health centre and one in the community and treats them as similar. The similarities are that the mothers seem to be comparable in both groups, but there is no information on the pregnancies and the deliveries. It is not at all clear whether these neonates are comparable. Yes, this might be the limitation of the study but we observed that twins (a risk factor) were as likely to be delivered in the community (38%) just as singletons (40%). We have mentioned this in the manuscript.

The point that is made in the article that continuity of care is essential and that. Basically all neonates, once they have survived child birth, are exposed to the same level of care (or lack of it), whether they are born in a health facility or in the community is very important and merits publication, in fact needs to be published. But that is not the same as answering the question put forward in the title of the article: does the place of delivery matter when it comes to neonatal survival? This requires much more discussion and the data presented is a very good basis on which to discuss, but is not enough.

If no additional data on pregnancies and deliveries is available then the discussion needs to address that. What were the reasons for those neonatal deaths? What was the mortality within the first day after delivery in both settings? How many of the neonatal deaths of babies born in the health centre occurred after discharge? It might also be that many more of the babies born in the health centre would have died had they been born in the community and then the place of birth might well matter very much; it
might also be that the quality of care in the health service is such that there is no difference between
the service given there and in the community. Without knowing more about the pregnancies, deliveries
and neonates, I feel it is not possible to answer the research question. **We have added data on mortality within the first days of life and place of death by place of delivery was in the manuscript. That gives an insight into death after discharge. We have used twins as one of a well known risk likely as showed that such deliveries were essentially as likely to happen in the community as are singleton deliveries. That argument has been included in the revised manuscript.**

What seems to be clear from this study is that independent of place of delivery, the services available
for neonates seem to be the same for all neonates. I am not sure though whether this is a true
assumption. **The services mentioned here, for those delivered in health facilities refer to “after discharge”. This is partially explained by place of death as compared to place of delivery where a proportion of those delivered in the community seek care in health facilities and a substantial number of those delivered in health facilities die in the community. This has been included in the revised manuscript.**

, for those

feel this study needs to be published after revision addressing those points and a more comprehensive
discussion of the limitations of the study.