Author’s response to reviews

Title: Effect of the 2015 earthquake on pediatric inpatient pattern in a tertiary care hospital in Nepal.

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To
The Editor
BMC Pediatrics

Sub: Submission of revised version of the manuscript BPED-D-17-00150

Dear editor
We are submitting the revised version of the manuscript titled ‘Effect of the 2015 earthquake on pediatric inpatient pattern in a tertiary care hospital in Nepal’ (BPED-D-17-00150). We have tried to revise the manuscript thoroughly in the light of the reviewers’ comments.
Editor comments:

1) Please address the cautions needed for interpretation identified by reviewer 1 when revising the discussion and conclusions. The possible biases should be more thoroughly discussed in the limitations and reflected in the conclusions.

This has been carried out.

2) In the discussion, please contrast these findings against published community-based data on the epidemiology of childhood illness following the earthquake.

We have tried to do this on pages 11 and 12 of the Discussion section.

3) Please combine tables 1 and 2 and tables 3 and 4.

We have done so.

4) Please report descriptive statistics about the effect of the earthquake on children admitted (how many had a parent injured or dead, how many displaced etc.)

This has been carried out at the beginning of the Results section on page 7.

5) Please specify the statistical test of trend reported in table 5.

Chi square test for trend was employed. This has been mentioned as a footnote to table 3 (which was the old table 5).

6) Please make sure to spell out acronyms the first time they are used, including in the abstract.

This has been carried out.

7) Please include your data collection instruments as a supplemental file.
This has been done.

Reviewer report:

Matthew Ellis (Reviewer 1)

1) The authors compare two samples of their in patient population (n approx. 1000) in the 15 weeks following the earthquake. They analyse patient demographics and presenting complaint according to district of residence (classified as earthquake affected or not) and separately as to whether their home was actually affected. They demonstrate a modest excess in pneumonia, acute gastroenteritis and glomerulonephritis cases amongst those living in earthquake affected districts, however when focussing on the 50% of the population from earthquake affected districts who reported home damage (n=327) only gastroenteritis met their predefined significance cut off (p<0.05). If there is a causal association with the earthquake then this might be expected to be a marker of greater impact which rather goes against the authors' hypothesis.

The authors looked for a change in their admission pattern following the earthquake and actually detected very little change.

We have modified the wording of our objectives to include ‘differences, if any’. The study was conducted to examine the effect of the 2015 earthquake on inpatient admission pattern in the general pediatrics department at Kanti Children’s hospital in Kathmandu. As the reviewer has rightly pointed out, differences were noted among some subgroups but not among others. We have tried to explain the observed differences in the discussion section of the study. We have also modified the limitations subsection as suggested.

2) As a specialist children's hospital serving in large part the neighbouring conurbations of the Kathmandu Valley their admission pattern may be expected to pick up significant spikes in disease occurrence in the Valley. Their observation of little difference in disease patterns amongst admissions from affected and unaffected areas is perhaps testament to the primary care efforts immediately following the earthquake.
We do agree with the reviewer that this could be a possible reason for our observations. We have mentioned this on page 10 continued on to page 11.

3) It would be interesting to combine this data with community based data from the effected districts to get a fuller picture of the post earthquake epidemiology.

We have tried to address this on pages 11 and 12. However, we were not able to locate studies specifically dealing with the epidemiology of childhood non-traumatic illness from the affected districts.

4) It is hard to judge the degree of geographical selection amongst the admitted population without fuller data on district of residence. As always attempts to infer epidemiological findings from in patient data are difficult due to problems of bias. Those children admitted from outside the valley are more likely to be a selected population. It would have made interpretation more transparent to have an idea of the population from the Valley compared to the more outlying population.

We agree with the reviewer. We have tried to use data from the Nepal Demographic and Health survey on page 11. The valley belongs to the hill region of Nepal and is urbanized. Children’s health is therefore better in the valley compared to the outlying districts as the parameters are better in urban areas and among hill districts.

5) The glomeronephritis case series is intriguing - the statistical test applied for trend isn't specified in the methods.

We have mentioned the test employed as a foot note to table 3 on page 18.

Janak Koirala (Reviewer 2):

This manuscript has attempted to assess earthquake's impact on children's health by comparing children coming from earthquake affected and non-affected areas of Nepal. It provides an
important outlook on effect of earthquake on health other than trauma which could be helpful in planning and preparing for future earthquakes.

We thank the reviewer for the comments.

1) The main weakness of this paper is its abstract. The Method section of main manuscript is well written, however that is not reflected in Method section of the Abstract. In Abstract section, clearly state objective(s) that matches the Method section's objectives. Include a sentence about Statistical analysis in Abstract.

Substantial modifications to the Abstract have been carried out on pages 2 and 3.

2) Review language and grammar throughout the manuscript especially the Abstract section. Always spell out full words first before using abbreviations.

This has been done and words have been spelled out in full on first mention in the text.

3) In Results section, although it is not necessary to include all data it will be helpful to include some of the major data in this section. For example, what was the total number of patients reviewed and how many were in each group? It is also important to include some of the important numbers in the Abstract.

This has been carried out as requested by the reviewer. (Results section: pages 7, 8 and 9)

4) Tables- make sure to include total number of patients (N) for each group in all tables.

This has been carried out in all the tables.

Editorial policies:
Declarations
- Ethics approval and consent to participate
- Consent to publish
- Availability of data and materials
- Competing interests
- Funding
- Authors' Contributions
- Acknowledgements

These declarations have been kept on page 14.

In addition, the references section on pages 15 and 16 has been reformatted in line with the recommended journal style.

The authors' affiliations have been updated (the order remaining the same).

These changes have been carried out using yellow highlight and/or track changes in the revised manuscript.

If any further modifications or clarifications are required we shall be happy to oblige.

Hoping for a favorable consideration

Thanking you

With regards
Dr. BR Giri and coauthors.