Author’s response to reviews

Title: Incidence and risk factors of Retinopathy of Prematurity in three neonatal intensive care units in Palestine

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Author’s response to reviews:

Reviewer reports:
Graham E. Quinn (Reviewer 1):

General comments:
the real thrust of this work must be detecting ROP that requires treatment, a relatively small proportion of those infants who require examination.

(page 6 lines: 6-7)

Specific comments:
Background:
Last sentence of para 3 - needs revision or proper references
Paragraphs number 2 and 3 were rephrased and not related sentences were omitted (page 3 lines: 7-11).

Para 4 - needs to be revised, shortened and distinction made between countries with low and moderate levels of human development and those with high levels of human development (this seems a more useful contact that low, moderate and high income countries)
Done (page 3 lines 13-16).
Methods:
Para 1 - combine the second and third sentences and shorten to just provide the criteria used to determine where ROP screening was indicated.
Done. (page 3:line 20-24 + page 4: line 1-3).

Para 3 - For purpose of data analysis - use "examined" rather than "explored".
Done (page 4 line: 20).

Ethical considerations - I do not understand the sentence "no human being was addressed."
We meant to say that we didn't deal with patients themselves, only their files. We omitted the sentence.

Results:
Para 1, line 2 - insert "retrospective" before "study"
Done (page 6 line: 6).

Para 2 - move above Table 1
Done (page 6).

Para 3 - much of this is redundant to Table 2 and perhaps just highlighting major findings would be more helpful
We summarized and highlighted the major findings (page 7 lines: 2-10).

Para 3, sentence 3 - it does not seem reasonable to provide p values for the comparison of vaginal delivery vs C-section.
We omitted this comparison.

Para 3, sentence 6 - the method obtaining this p value is not clear
First we divided our sample into two groups: those who were a part of a singleton pregnancy and those who were a part of multiple gestations. Then, we further divided the second group "infants who were a part of multiple gestation" according to the status of their siblings from the same gestation, whether they are affected by ROP or not. We made a comparison between those last 2 groups after splitting the data according to the multiple gestation status (page 7 lines: 5-8).

Para 5, line 1 - compared to what?
Compared to infants who didn't receive blood transfusion (page 9 lines:6-7).

Discussion:
This needs tightening to put these results in context rather than a litany of findings and other studies.
Para 2 - very useful context and the major finding of the study
Para 5 - "Neonatal co-morbidities" - reformat for clarity
Para 7 - "Surfactant" - suggest change "insignificant"
Nearly the whole discussion section was rephrased and new paragraphs were added for clarity.

Para 3 - put "in grams" after birth weight
Done (page 12 line: 14).

Limitations, sentence 2 - provide how many NICUs there are in Palestine for context
the number of the NICUs was added (page 15 line 1).
S. Grace Prakalapakorn (Reviewer 2):

Abstract:
-(line 7): I suggest saying either, "Retinopathy of prematurity (ROP) can be a serious …" or "Severe retinopathy of prematurity (ROP) is a serious …." … because most (~90%) ROP is mild.
We edited it into severe retinopathy of prematurity (page 2 line: 3)

Background:
-(line 8): Please put parentheses around ROP: (ROP)
Done (page 3 line:4).

-(lines 10-13): I suggest moving the last sentence of paragraph to after the sentence that says, "Among those, ROP is …".
The two sentences were rephrased (page 3 lines: 5-6).

-(lines 13-17): Again (as in the abstract), I suggest saying either, "Retinopathy of prematurity (ROP) can be a serious …" or "Severe retinopathy of prematurity (ROP) is a serious …." … because most (~90%) ROP is mild. Also, abbreviate "Retinopathy of prematurity" We edited it into severe retinopathy of prematurity (page 3 line: 7).

-(lines 27-35): I would suggest changing "body weight" to "birth weight". Also I would combine this paragraph with the one above. And in the last sentence, the authors should write out the "other variables" and reference them
The two paragraphs were rephrased and not related sentences were omitted (page 3 lines: 7-11).

-(lines 37-50): In the first sentence, do the authors mean to say that the incidence of ROP varies between countries? Please clarify. Again, abbreviate "Retinopathy of prematurity" The authors should end this paragraph with a sentence that states the purpose of their study.
Yes, that’s why we changed "significant" into "considerable" (page 3 line:12).
Retinopathy of prematurity was abbreviated (page 3 line:13).
We added a sentence (page 3 lines: 17-18).

Materials and Methods:
-In the first paragraph the authors should make a statement about IRB approval. (maybe move up the "Ethical considerations" section from page 5 - but still needs to say if the IRB approved the study or not)
Done (page 3 lines: 20-21)

-(page 3, lines 54-55): Please put parentheses around NICU: (NICU) and please list the 3 NICUs
-(page 3, line 59): Please change "NICU" to "NICUs"
Done (page 3 lines: 23-24).
-(page 4, line 9): Please change "is" to "are"
The sentence that contained "is" was omitted, and the paragraph was rephrased (pages 3+4 lines: 24+1-3).

-(page 4, line 16): Please go into more detail of how it is determined to examine the infant 4, 5, or 6 weeks post-natal. Are there guidelines of how to determine this, if so please reference.
We referenced why infants were examined 4-6 weeks postnatally and clarify how the exact time of examination was determined (page 4 lines:5-7).

-(page 4, line 19): Please change "was" to "were"
Done (page 4 line: 7).

-(page 4, lines 21-24): Please include what type of lens was used (e.g. 20D, 28D, 30D, etc)
Done (page 4 line: 9).

-(page 4, lines 26-31): Please go into more detail of how it is determined when to repeat the exams. Are there guidelines of how to determine this, if so please reference. What if there was not ROP, were examinations not repeated even though vascularization was not complete?
We clarified the idea and referenced it (page 4 lines: 11-15).

-(page 5, lines 38-41): Please add company, location and version number of the SPSS software
Done (page 5 lines: 19-20).

**I would suggest that the authors run multivariate analysis of risk factors to control for other factors presented in their study - would be much more helpful than the univariate analysis presented**
Done page 10

Results:
-(page 6, lines 35-37): the incidence of ROP was not statistically significantly different in males versus females so I suggest the authors restate this as, the incidence of ROP was x in males and y in females.
Done (page 6 lines: 11-12).

-(page 7, lines 12-14): please clarify, that "having a sibling affected by ROP was found to be of statistical significance" among who?
Done (page 7 lines: 5-8).

Table 2:
-Tables should be stand alone - please define all abbreviations (e.g. SD, CS, A1, A2, A3, A4, B1, B2, HB) - it seems that these abbreviations could be removed: A1, A2, A3, A4, B1, B2
We omitted unnecessary abbreviations and all abbreviations that are found in the table were defined (pages 7+8).

-(page 8, lines 53): replace O2 with "oxygen"
we replace O2 with oxygen in the whole article.

Discussion:
-The discussion should be written in paragraphs and not sections as is done throughout, also this section needs more insight from the authors, currently it reads more like a results section and a list of
previous literature than actual discussion.

The paragraph under "Conclusion" would work better as the first paragraph of the discussion. Nearly the whole discussion section was rephrased and new paragraphs were added for more clarity.

-(page 9, lines 22-25): The authors should state why they chose to compare the incidence in their country to these countries (e.g. similar economic status, etc).

Table 5:
-I could not figure out why the countries are listed in this order? Not alphabetical or by year or incidence? Please clarify.
This paragraph was edited. The incidence of ROP in Palestine was compared with nearby parts of the world. The countries listed in the table were ordered according to their level of human development index (page 11 lines: 2-7 and table 6).

-(page 10, lines 4-10): why were only these countries chosen?
We gave examples from countries with nearby human development index (page 12 lines: 4-7).

-(page 10, lines 9-14): The most recent AAP guidelines were published in 2018 - please update this. Also, the abbreviation for American Association for Pediatric Ophthalmology and Strabismus is AAPOS, not AAP. The authors should discuss the fact that screening guidelines differ by country and if Palestine has established screening guidelines in place. If so, please discuss the guidelines. The guidelines were updated (page 12, line: 10).
The abbreviations of the AAP and AAPOS were corrected (page 12 lines: 9-10)
A new paragraph was added to discuss the fact regarding screening guidelines differences between countries and what is established in Palestine (pages 11+12 lines: 9-14 + 1-2).

-(page 10, lines 17-24): In the 4 infants with ROP they mention, did they have any comorbidities in which screening is recommended by the AAP/AAPOS guidelines? Please be more specific with details in these cases to say if they would have been missed for screening or not if the American guidelines were followed.
Done (page 12 lines: 12-13).

-(page 11, lines 4-7): The authors should talk about why they think "Being a part of multiple gestation and having a sibling affected by ROP is associated with increased risk for development of ROP"
Done (page 13 lines: 2-7).

-(page 11, lines 9-12): The authors should talk about why they think "Lower average hemoglobin level at birth was found to be associated with the development of ROP"

-(page 11, lines 38-41): The authors should talk about why they think "a low level of hemoglobin is associated with increased incidence of ROP.
Done (page 13 lines: 8-17).

-(page 11, line 28/29): Should there be a period after "ROP"? … I think "As we showed" is the start of a new sentence? Please clarify
The paragraph containing this sentence was rephrased.

Conclusion
-As mentioned above: As currently written, this paragraph would work better as the first paragraph of
The authors need to talk about what the findings presented in the manuscript add to the literature. Why should this work be published? What's the bigger meaning?
The whole conclusion section was edited (page 15 lines: 4-10).