Reviewer’s report

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

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Reviewer: S. Grace Prakalapakorn

Reviewer's report:

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

Purpose:
To investigate the incidence of retinopathy of prematurity and its association with some risk factors in Palestine.

Summary: This was a retrospective study of 115 infants screened over 1 year for ROP in 3 NICUs. The authors report the incidence of ROP in their cohort and univariate analysis of risk factors associated with the development of ROP.

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.

Background:
-(line 8): Please put parentheses around ROP: (ROP)
-(lines 10-13): I suggest moving the last sentence of paragraph to after the sentence that says, "Among those, ROP is …." 
-(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"
-(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
-(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.

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)
(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"

(page 4, line 9): Please change "is" to "are"

(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.

(page 4, line 19): Please change "was" to "were"

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

(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?

(page 5, line 7): Please put parentheses around CS: (CS)

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

**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**

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.

(page 6, Neonatal characteristics): Please include the range of gestational age and birthweight.

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

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

(page 8, lines 53): replace O2 with "oxygen"

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

-(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

-(page 10, lines 4-10): why were only these countries chosen?

-(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

-(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.

-(page 10, lines 31-34): why were only these countries chosen?
-(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"
-(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, line 28/29): Should there be a period after "ROP"? … I think "As we showed" is the start of a new sentence? Please clarify
-(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"

Conclusion
-As mentioned above: As currently written, this paragraph would work better as the first paragraph of the discussion
-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

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable
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