

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Effects of remote learning during the COVID-19 lockdown on children's visual health: a Systematic Review
AUTHORS	Cortés-Albornoz, María; Ramírez-Guerrero, Sofía; Rojas-Carabali, William; de-la-Torre, Alejandra; Talero-Gutiérrez, Claudia

VERSION 1 – REVIEW

REVIEWER	Mahmoud, Amira Cairo University, Physical therapy for pediatrics
REVIEW RETURNED	20-Mar-2022

GENERAL COMMENTS	<p>Comments on manuscript (bmjopen-2022-062388) entitled "Effects of remote learning during COVID-19 lockdown on children's visual health: a Systematic Review.</p> <p>Overall, the idea of research is very interesting, well written and reasonable. However, there are some comments and suggestions.</p> <p>Title</p> <ul style="list-style-type: none">- Well structured <p>Abstract:</p> <ul style="list-style-type: none">- You may consider start with "Background and objectives"- Well structured- Keywords: write it in alphabetical order <p>Introduction:</p> <ul style="list-style-type: none">- Well structured <p>Methodology</p> <ul style="list-style-type: none">- Well structured <p>Statistical analysis</p> <ul style="list-style-type: none">- Well structured <p>Discussion</p> <ul style="list-style-type: none">- Well structured
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REVIEWER	Mohan, Amit Global Hospital Institute of Ophthalmology
REVIEW RETURNED	24-Mar-2022

GENERAL COMMENTS	<p>There were numerous research articles regarding myopia progression and acute acquired esotropia during COVID19 pandemic. it should be included in your review. eg- DESK study-4 & DESK study-3 of IJO & Strabismus journal respectively.</p> <p>Limitations and strength of article should also be included.</p>
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REVIEWER	Muntz, Alex The University of Auckland
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REVIEW RETURNED	30-Mar-2022
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GENERAL COMMENTS	<p>This systematic review is a welcome and timely contribution to the evidence base on ocular impacts of extended screen use during COVID-19 on paediatric populations.</p> <p>The value of the paper might be considerably enhanced by summarising the results in a table (similar to, or in Table 1) with the main outcomes for each study in the SR. In the methods, the authors describe data extraction to include the "final question: is there an effect of COVID-19 on visual health? Visual health improves, worsens or remains the same?". This appears to be an adequate question to address in a table format. I suggest that one column might briefly summarise the impacts in each study, while the final column might respond to the better/worse/same question. Readers may find great benefit from such an overview.</p> <p>As it currently is, Table 1 might benefit from expanding the Reference column to include (Author Name, Year) and the reference number, instead of the latter alone. Similarly, Table 2 should contain a first column titled Author, Year (with reference), before the Article column. This will significantly help readers navigate the paper.</p> <p>In the abstract, results section, the second sentence on the risk of bias assessment appears to belong to the methods section (as presented in the manuscript body). I would suggest condensing this lengthy sentence to acknowledge the assessment of the risk of bias (and move it to the abstract methods) and use the gained word count to expand on the actual study results instead.</p> <p>Introduction: the first paragraph discussing the global impact of COVID-19 is referenced by a 2018 study. This does not appear appropriate; please amend. The same study is later used to reference that 100% of the world's population (!) is expected to be myopic by the end of the century. Might this be a potentially exaggerated prediction? How well is it accepted in the international peer-reviewed literature? A more cautious, nuanced discussion of the rise of myopia might be preferred.</p> <p>Please include a discussion on study limitations. For e.g. how might results be interpreted given that studies included in the SR were predominantly conducted in Asia (14 out of 19)?</p> <p>Some editorial input to improve English language use may be warranted.</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

1. - You may consider start with "Background and objectives"

- Keywords: write it in alphabetical order

Answer: The abstract was adapted according to the reviewer's suggestions, and keywords were written in alphabetical order. (pg. 3. Lines 48-49).

Reviewer 2:

1. There were numerous research articles regarding myopia progression and acute acquired esotropia during COVID19 pandemic. it should be included in your review. eg- DESK study-4 & DESK study-3 of IJO & Strabismus journal respectively.

Answer: We agree with the reviewer, we included both studies in the review (PRISMA diagram, table 1, supplementary tables and manuscript) (see results section)

2. Limitations and strength of article should also be included.

Answer: We included a section of limitations and strengths after the abstract (pg. 3. Lines 50-60). Moreover, limitations were analyzed at the end of the discussion (pg. 22 Lines 354-359).

Reviewer 3:

1. The value of the paper might be considerably enhanced by summarising the results in a table (similar to, or in Table 1) with the main outcomes for each study in the SR. In the methods, the authors describe data extraction to include the "final question: is there an effect of COVID-19 on visual health? Visual health improves, worsens or remains the same?". This appears to be an adequate question to address in a table format. I suggest that one column might briefly summarise the impacts in each study, while the final column might respond to the better/worse/same question. Readers may find great benefit from such an overview.

As it currently is, Table 1 might benefit from expanding the Reference column to include (Author Name, Year) and the reference number, instead of the latter alone. Similarly, Table 2 should contain a first column titled Author, Year (with reference), before the Article column. This will significantly help readers navigate the paper.

Answer: Table 1 and a data extraction table have been merged; a new table is now found as Table 1. It includes reviewers' recommendations.

• In the abstract results section, the second sentence on the risk of bias assessment appears to belong to the methods section (as presented in the manuscript body). I would suggest condensing this lengthy sentence to acknowledge the assessment of the risk of bias (and move it to the abstract methods) and use the gained word count to expand on the actual study results instead.

Answer: The abstract was changed according to the reviewer's suggestions. (see abstract, pg 2. Lines 31-41).

2. Introduction: the first paragraph discussing the global impact of COVID-19 is referenced by a 2018 study. This does not appear appropriate; please amend. The same study is later used to reference that 100% of the world's population (!) is expected to be myopic by the end of the century. Might this be a potentially exaggerated prediction? How well is it accepted in the international peer-reviewed literature? A more cautious, nuanced discussion of the rise of myopia might be preferred.

Answer: Thank you for your observation. We have rephrased the sentence using another reference. (pg 3. Lines 66-68).

3. Please include a discussion on study limitations. For e.g. how might results be interpreted given that studies included in the SR were predominantly conducted in Asia (14 out of 19)

Answer: We included a section of limitations and strengths after the abstract. Moreover, limitations were included at the end of the discussion before the conclusion. (pg. 22. Lines 354-359).

4. Some editorial input to improve English language use may be warranted.

Answer: Following the reviewer's recommendation, we have sent the paper to professional styling and English grammar evaluation.

VERSION 2 – REVIEW

REVIEWER	Mahmoud, Amira Cairo University, Physical therapy for pediatrics
REVIEW RETURNED	26-May-2022

GENERAL COMMENTS	I would like to thank the authors for their successful work to address the reviewers' comments. The authors have done great efforts to accomplish this work. They fulfilled all reviewers' comments and made necessary changes throughout the manuscript. I recommend to accept the manuscript its revised form.
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REVIEWER	Muntz, Alex The University of Auckland
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REVIEW RETURNED	27-Jun-2022
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GENERAL COMMENTS	The revised manuscript has been greatly improved and is suitable for publication. Thank you for the opportunity to review it.
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