Response Letter

Dear Editor-in-Chief

We are grateful to the reviewers for the time and effort dedicated to review our manuscript entitled "Impact of sports participation on cardiovascular health markers of children and adolescents: systematized literature review". The comments were important to improve the manuscript. Therefore, we have done our best to address them all, and edited the new version of the manuscript accordingly.

The reviewers' comments are listed below in numerical order and have been answered in a point-by-point manner. As requested, the revised version of the manuscript has been uploaded with all changes marked in the text.

We believe that all issues and suggestions raised by the reviewers have been adequately addressed and that the manuscript has been substantially improved. The modifications made following your suggestions are in a different color

Respectfully

The Authors

Reviewer #1:

Dear Associate Editor of Peer Review, World Journal of Clinical Pediatrics.

"Impact of sports participation on cardiovascular health markers of children and

adolescents: systematized literature review"

Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Specific Comments to Authors: This study aims to synthesize the available literature on the impact of sports participation on cardiovascular outcomes in children and adolescents. The topic is very important and relevant to the field. However, some issues should be addressed.

Comment 1: Abstract - Results section is poorly framed. It has to be re-written. -Recommendations should be included in the conclusion section.

Response 1: Dear Reviewer #1. Thank you for your comment, the abstract has been rewritten.

Comment 2: Introduction - Introduction is very short. Introduction does not cover all the elements of the manuscript. - Explain the rationale of the study. Please delete information unrelated to objective so that the section will be more detailed and clarified.

- Kindly focus on three elements of introduction. a. What is known about the topic? (Background) b. What is not known? (The research problem) c. Why the study was done? (Justification) - Hypothesis of the study and its significance are not clear.

Response 2: Dear Reviewer #1. Thank you for your comments, the Introduction Section has been re-written as suggested.

Comment 3: Methods - Methods need to be organized. Ethics and endpoint of the study are not clarified. - According to PRISMA checklist, some information are missed. Please, review.

Response 3: Dear Reviewer #1. Thank you for your comment. This Section has been widely improved following your comments.

Comment 4: Discussion - The discussion section needs to be described scientifically. Kindly frame it along the following lines: 1. Main findings of the present study 2. Comparison with other studies 3. Implication and explanation of findings 4. Conclusion, recommendation and future direction.

Response 4: Dear Reviewer #1. Thank you for your comments. This Section has been modified as requested.

(1) Science editor:

The manuscript elaborated a review of the impact of sports participation on cardiovascular health markers of children and adolescents. The manuscript is well written. Nevertheless, there are a number of points that may deserve some revisions.

Comment 1. Self Citation Count:7. The self-referencing rate should be less than 3%.

Response 1: Dear Science editor, following your suggestions we have adjusted the references and decreased the percentage as required. However, some of the articles that were considered for the synthesis of the review were captured by the search strategy, which makes it relevant for them to remain within the cited references.

Comment 2. Tables should be more concise.

Response 2: Dear Science editor, following your suggestions we have adjusted the tables in the text.

Comment 3. The author should elaborate on the mechanism research in more detail in the discussion part.

Response 3: Thank you for the observation, the text has been adjusted according to the suggestion.

Coment 4. "During sports participation, evidence shows that athletes present alterations in vascular structures and functions". I don't think this conclusion is sufficient. The author's manuscript lacks the support of literature and data.

Response 4 : Dear Science editor, following your suggestions we have adjusted the conclusion

"In summary, although sports participation seems to be related to improvements in blood pressure (diastolic), the literature assessing the impact of sports participation on cardiovascular health in children and adolescents is extremely scarce."

Coment 5. Language Quality: Grade C (A great deal of language polishing) Scientific Quality: Grade B (Very good)

Response 5 : Dear Science editor, following your comment, the manuscript has been revised by an English native speaker with wide experience in Health Sciences.