

The burden of disability in type II Diabetes Mellitus and the moderating effects of physical activity

February 27, 2023

Editor-in-Chief,

World Journal of Clinical Cases.

Dear Editor,

Thank you for inviting us to revise our manuscript titled, "**The burden of disability in type II Diabetes Mellitus and the moderating effects of physical activity**". We have carefully read the reviewers' comments and have found them to be helpful. We have revised the manuscript according to their recommendations.

To facilitate your evaluation of our revised manuscript, we have incorporated all the comments in our reply and addressed the requests with specific point-by-point responses to each query. We separately delineated each query with a corresponding response. New inserts in the manuscript file were highlighted in blue.

Reviewer#1:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: The conclusions, abstracts, and title are reasonable. To support their content, the authors must include at least one figure and one meta-analysis study.

Response: We have added two figures and a table as suggested. Please see figures 1 & 2 and table 1.

Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Minor revision

Specific Comments to Authors:

1. The incidence of diabetes is rising rapidly, which has brought a heavy burden to diabetic patients and the whole society. This article discusses the impact of diabetes and preventive measures from the aspects of the disability burden of patients with type 2 diabetes and the regulating effect of physical activity, which is novel and has clinical guiding significance.

Response: Thank you.

2. The title of the article is unattractive, and the summary of the "modulation effect of physical activity" in the article is not comprehensive and accurate enough in the abstract.

Response: We have added comprehensive information about the modulation effect of physical activity to the abstract. Please see the abstract, page 1.

3. The key part of the article is the regulatory effect of physical activity on diabetic patients, but the article only briefly explains the impact of physical activity on diabetes and its complications. It is suggested that the influence mechanism between the two can be properly explained to make the content of this point more convincing and applicable.

Response: Thank you. We have explained the mechanisms of the regulatory effect of physical activity on diabetes. Please see the section effect of physical activity on diabetes and its complication, page 6.

4. The conclusion is too simple, without clearly clarifying the main points of the entire article, and there is no research significance or deeper discussion.

Response: We have improved on the conclusion. Please see the conclusion section, page 8.

Reviewer #3:

Scientific Quality: Grade D (Fair)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: Please consider the following point-by-point comments by sections of the author's manuscript:

[ABSTRACT] It does not strongly communicate the aim/purpose; the last two sentences appear to be dangling phrases and need to connect better with the author's intentions as the thesis statement. The thesis statement in the introduction and the closing sentences in the abstract are not parallel.

Response: We have removed the last two sentences and improved on the abstract. Please see the abstract section, on page 1.

[INTRODUCTION] Similar grammatical errors are also detected throughout the prose, including the INTRODUCTION. There is a lot of unnecessary "wordiness," which can be simplified using straightforward clear-cut sentences. The paragraph regarding cost analysis from a systematic review lists various information sifted from the study by nations; this can be shortened by re-phrasing the sentence with "international, or something which indicates a "global" situation rather than each country (takes up space and takes away time from both writer and reader).

Response: Thank you. We have corrected the grammatical errors and improved the grammar. We have rephrased the paragraph regarding cost analysis to reflect the global outlook. Please see the introduction section, page 1.

["Profiles and patterns of disability in diabetes"]

In this section, the authors discuss the topic of "mortality" → not clear why this matter is brought up while the focus is "disability" or "morbidity?"

Response: New information related to comorbidities was added and Table 1 was inserted,

Consider using useful abbreviations ◇ “ADLs” (activities of daily living); “IADLs” (instrumental activities of daily living), bearing in mind that proper use of the abbreviation is such that the vernacular of interest is introduced with the corresponding abbreviation in parenthesis (i.e., “DM” for diabetes mellitus).

Response: The words diabetes mellitus, activities of daily living and instrumental activities of daily living have been abbreviated in the article, with the abbreviation in brackets, the first time it appears.

I find the use of “disability” as an inappropriate descriptive term whereby authors stated ◇ “Specific disabilities are discussed below and are shown in Table 1.” In one sense, I feel that the more appropriate vernacular for the reviewed topic areas in the prose should be referred to as “limitations,” NOT “disabilities.” Disability refers to the functionality of the total person as it relates to the level of activity the affected patient can engage in within the context of their identified physical limitations.

Response: In the section title, the word “limitations” has been added to disability. In the prose, the word “disability” has been removed and replaced by “limitations”.

[Effect of disability, QALY, and DALY on quality of life] The extensive discussion in the last paragraph of this section regarding the “global burden with QALY and DALY ” seems unnecessary ◇ the message can be succinctly incorporated in preceding paragraphs using one or two sentences.

Response: Thank you. Done as suggested. Please see the section effect of disability, QALY, and DALY on quality of life, page 5.

[Effect of physical activity on diabetes and its complication] It is unclear what point the author is attempting to get across by including the paragraph which begins with “The mechanism by which PA...”. In contrast, the opening paragraph in the following review topic communicates an excellent and focused discussion regarding “PA,” as in the subsequent section, under the same review issue. Keeping in line with the thesis statement and scope of this manuscript, the authors did a very excellent job of communicating the ideas and displayed more of a “min-review” like discussion in the remaining paragraphs in the prose, leading up to their “conclusion.”

Response: The paragraph is introduced to explain the regulatory mechanism of physical activity on diabetes. However, we have reconstructed the paragraph for clarity. Please see the section effect of physical activity on diabetes and its complication, page 6.

[Conclusion] The concluding remarks should be more centered on the moderating effects & points on “PA” based on their discovery of the underlying themes from the reviewed manuscripts.

Response: Thank you. Done as suggested. Please conclusion section, page 8.

Lastly, consider using more tables and figures to accompany the discussions for less verbosity; be succinct and to the point as the proverbial saying goes, “pictures paint a thousand words.”

Response: We have added two figures and a table as suggested. Please see figures 1 & 2 and table 1.

EDITORIAL OFFICE’S COMMENTS

I recommend the manuscript to be published in the World Journal of Clinical Cases. However, the quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, the author(s) must provide the English Language Certificate issued by a professional English language editing company. Please visit the following website for the professional English language editing companies we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: <https://www.referencecitationanalysis.com/>.

Response: We have improved the quality of the English language in the manuscript and the English Language Certificate issued by a professional English language editing company is attached. The content of the manuscript has been improved by adding the latest cutting-edge research results.