PEER-REVIEW REPORT

Name of journal: *World Journal of Methodology*

Manuscript NO: 85475

Title: Neurological and gastrointestinal symptoms characterize Long COVID particularly in minority populations

Provenance and peer review: Unsolicited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05626712

Position: Peer Reviewer

Academic degree: MD

Professional title: Academic Editor, Academic Research, Assistant Professor, Attending Doctor, Research Scientist

Reviewer's Country/Territory: Iran

Author's Country/Territory: United States

Manuscript submission date: 2023-05-01

Reviewer chosen by: Geng-Long Liu

Reviewer accepted review: 2023-05-29 03:42

Reviewer performed review: 2023-06-07 06:19

Review time: 9 Days and 2 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [Y] Grade E: Do not publish
Novelty of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [ ] Grade C: Fair [Y] Grade D: No novelty

Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation
Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [ ] Minor revision [ ] Major revision [Y] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous
	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Summary: a Review-based study to report the incidence of neuro/GI Long COVID symptoms in US-patients.   Major concern: In the conclusions section, the authors stated that this study demonstrated a positive correlation between neuro and GI symptoms. However, I found this study just to sum up and report the number of patients with neuro/GI symptoms, and did not find any analysis in the paper. Comments: 2. It is suggested to revise the manuscript for the minor typographical errors-for example: gastroesophageal reflex => reflux. 3. It is unclear why small case studies (with < 5 cases) were not included in the study.   4. (any study with all or most patients from Western countries including US minority populations).   Including studies with non-US participants is acceptable only if the investigators had access to the data. However, this information has not been stated in the manuscript.

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Novelty of this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No novelty
Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [Y] Grade B: Good [ ] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
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SPECIFIC COMMENTS TO AUTHORS

Dear Authors, Thank you very much for this well-written manuscript, regarding an important topic with enormous healthcare implications. Please find below my comments and queries, pertaining to your manuscript: 1. Figure 1: Please include the exclusion criteria of the 1122 patients in the preselection phase to your flow chart and present them also in the text. 2. Statistical analysis: Please provide the statistical analysis used for the assessment of the studies quality and heterogeneity selected for this systematic review. 3. Table 1: Please explain the term PMID. 4. Figure 3: Please define if the percentages are referring to the overall 27,383 included to your review. 5. Figure 6: Please explain all the abbreviations used. 6. Discussion: you don't need to explain the term PASV again if there is already explained above. 7. Discussion: it is confusing to report that you started with 8 studies and then reduced to 5 because you have already mentioned your inclusion and exclusion criteria. This information does not belong to the discussion. Best Regards

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [Y] Grade D: Fair [ ] Grade E: Do not publish
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Creativity or innovation of this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No creativity or innovation

Scientific significance of the conclusion in this manuscript	[ ] Grade A: Excellent [ ] Grade B: Good [Y] Grade C: Fair [ ] Grade D: No scientific significance
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
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SPECIFIC COMMENTS TO AUTHORS

1. The title should mention the article type. 2. The number of words in the abstract should be revised. 3. The title of the manuscript is not corresponding to the aim of the manuscript. Why did the authors specifically study neurological and gastrointestinal complications of long-term COVID? Why were other systems not included? The authors should explain these questions in the introduction. 4. Methodology. a. It is advised to revise the article type. E.g., retrospective review. b. How was homogeneity assessed among the selected studies? c. What was the statistical software used? d. Logistic regression. Describe the model performed. Describe how the variables were chosen. 5. All the abbreviations should be fully described at first appearance. E.g., NEURO. 6. References should be revised. There are two types of references with different numbers of citations. 7. The articles should be properly referenced. Avoid PMID numbers. 8. Limitations. There was a significant difference among the studies. Minorities were less reported, which could affect data interpretation. The studies were not particularly assessing the aim of this review.   The reviewer would like to ask the authors to provide a clear explanation regarding the aim of the manuscript. In the present form, it isn't easy

to understand why the authors studied this specific objective.

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statements	Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The style of presentation by the Tables and Figures of this study is complicated and not standard. On the Table 2, fever is not GI and Neuro symptom. The percentage of symptoms shown on the Fig 3 is unclear as to whether it is the percentage of all symptoms or all patients. If the authors make a critical review and analyze data from all include studies, it will make this study more interesting. The information in this study is only descriptive data from the included studies.

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| statements | Conflicts-of-Interest: [   ] Yes   [Y] No |

SPECIFIC COMMENTS TO AUTHORS

Could the authors explain why they assessed COVID-related neurological and gastrointestinal symptoms? Why were not studied neurological and pulmonary symptoms? Or other combination?