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OPEN PEER REVIEW

Evaluation of the Prevalence and Predictive Factors of Post-COVID Cognitive Disorders Among Iranian COVID-19 Recuperated Individuals: A Bayesian Analysis

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SUBMITTED	REVISED	ACCEPTED	DOI
9 Sep 2023	28 Oct 2023	5 Nov 2023	10.5812/ans-140290

About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

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1 Original submission

4 comments · 18 Sep 2023 – 7 Oct 2023

hamed tavan Reviewer

ACCEPT 18 Sep 2023

accept

Referee 1 Reviewer

MAJOR REVISION 18 Sep 2023

Dear AE,
Below you can find my review:
Abstract:
The abstract provides a concise overview of the study's objectives, methods, results, and conclusions. It effectively summarizes the key points of the research. However, there are a few areas where it can be improved:

Clarity and Structure: The abstract could be more structured. Consider breaking it down into distinct sections, such as Background, Methods, Results, and Conclusion, to make it easier for readers to follow.

Specificity: When discussing the prevalence of CDs, it would be helpful to provide the actual percentage (27%) in the abstract instead of just stating "less than half." This will give readers a clearer understanding of the findings.

Introduction:
The introduction provides a comprehensive overview of the background and objectives of the study. It effectively highlights the significance of COVID-related cognitive disorders (CDs). However, there are some points to consider:

Methods:
The methods section provides a clear description of the study's design, participants, and data collection tools. However, there are some areas that could be enhanced:

Sampling: The process of participant selection is described, but it might be beneficial to include more details about the inclusion and exclusion criteria. Additionally, it would be helpful to explain why this specific sample size (300 individuals) was chosen.

Statistical Analysis: While you mention that Bayesian analysis was used, provide a brief explanation of why Bayesian analysis was chosen over other statistical methods. This would help readers understand the rationale behind your choice.

Results:
The results section presents the findings in a clear and organized manner. However, there are some points to consider:

Discussion:
The discussion section offers a thorough analysis of the study's findings. However, there are some aspects to keep in mind:

Comparison to Existing Literature: When discussing the prevalence rates and risk factors for CDs, relate your findings to previous studies in the field. Explain how your results align with or differ from existing research.

Conclusion:
The conclusion provides a concise summary of the study's main findings and their implications. It aligns well with the study's objectives.

Associate Editor

MAJOR REVISION 7 Oct 2023

This manuscript presents a valuable study on the prevalence and predictive factors of post-COVID cognitive disorders among Iranian individuals.
The paper is generally well-structured, but it could benefit from minor improvements in organization and citation.
Including visual aids (tables, figures) in the Results section and providing more in-depth interpretation of findings in the Discussion section would enhance the paper's clarity and impact.
The abstract could be more structured for better readability. The study design should be mentioned in the first line of the Methods section of the abstract.

This research contributes to our understanding of post-COVID cognitive disorders and their predictors, which is a crucial area of study given the long-term health implications of COVID-19. With some minor revisions, this manuscript has the potential to be a valuable addition to the scientific literature in this field.

Editor-in-Chief

MAJOR REVISION 7 Oct 2023

Dear Author,
Thank you for submitting the article. It needs some revision. Please revise it based on the reviewers' and AE's comments.

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reply to Reviewers (140290)

The evaluation of the Prevalence and Predictive Factors of Post-COVID Cognitive Disorders among Iranian COVID-19 Recuperated Individuals: A Bayesian Analysis

Dear EIC

First, I would like to appreciate you for spending your valuable time in reviewing our manuscript (ID 140290).
Unfortunately, I did not receive any file (PDF/WORLD) which contains your valuable comments. Instead, it seems that all comments are limited to the list of "Reviewers' Comments" in my profile. Therefore, I just corrected based on what you said in that list, instead of a PDF to WORD file.

kind regards

Reviewer 1:

1- *Abstract:*
The abstract provides a concise overview of the study's objectives, methods, results, and conclusions. It effectively summarizes the key points of the research. However, there are a few areas where it can be improved:

A: Thanks for your valuable opinion

2- *Clarity and Structure: The abstract could be more structured. Consider breaking it down into distinct sections, such as Background, Methods, Results, and Conclusion, to make it easier for readers to follow.*

A: In order to obey your valuable comment, the structure of abstract was updated based on your journals instructions (Background, Objectives, Methods, Results, Conclusions)

3- *Specificity: When discussing the prevalence of CDs, it would be helpful to provide the actual percentage (27%) in the abstract instead of just stating "less than half." This will give readers a clearer understanding of the findings.*

A: Considered and corrected with respect

4- *Introduction:*
The introduction provides a comprehensive overview of the background and objectives of the study. It effectively highlights the significance of COVID-related cognitive disorders (CDs). However, there are some points to consider:

A: Whole introduction was revised and its fluency was improved.

Methods:

5- *The methods section provides a clear description of the study's design, participants, and data collection tools. However, there are some areas that could be enhanced:*

A: Thanks for your valuable opinion

6- *Sampling: The process of participant selection is described, but it might be beneficial to include more details about the inclusion and exclusion criteria. Additionally, it would be helpful to explain why this specific sample size (300 individuals) was chosen.*

A1: More details were added for inclusion and exclusion criteria.
**A2: The reason of 300 individuals as sample was declared in main manuscript (*G-Power v 3.1 =pilot sampling + assumption the lowest*

probability of psycho-cognitive illnesses occurrence + smallest effect size (effect size = 0.3) + highest degree of freedom (df = 8) + p < 0.05 = the extracted sample size from the software were 253 individuals). **So, 300 individuals were selected.**

7- *Statistical Analysis: While you mention that Bayesian analysis was used, provide a brief explanation of why Bayesian analysis was chosen over other statistical methods. This would help readers understand the rationale behind your choice.*

A1: It was fully mentioned and highlighted.

8- *Results:*
The results section presents the findings in a clear and organized manner. However, there are some points to consider:

A1: Thanks for your valuable comment, but I did not understand the points (Its empty and seems to be missed). I will add a screenshot of the list of reviewers' comments at the end of this file. Besides, there was no file uploaded either. Nevertheless, tables were added, some parts were summarized, and the fluency was improved (updated parts were highlighted).

9- *Discussion:*
The discussion section offers a thorough analysis of the study's findings. However, there are some aspects to keep in mind:

A1: • Totally considered.

10- *Comparison to Existing Literature: When discussing the prevalence rates and risk factors for CDs, relate your findings to previous studies in the field. Explain how your results align with or differ from existing research.*

A1: • Based on your valuable comments: 1. Whole discussion were edited in order to improve its fluency; 2. Some parts were displaced; 3. Similar researches were read again and more detail were added; 4. Further descriptions about how existing literatures were aligned or not have been added. (ALL WERE HIGHLIGHTED)

11- *Conclusion:*
The conclusion provides a concise summary of the study's main findings and their implications. It aligns well with the study's objectives.

A: Thanks for your valuable opinion

_____

Reviewer 2:

1- *Accept*

A: Thanks for your valuable decision

_____

Associate Editor 1:

1- *This manuscript presents a valuable study on the prevalence and predictive factors of post-COVID cognitive disorders among Iranian individuals.*
The paper is generally well-structured, but it could benefit from minor improvements in organization and citation.
Including visual aids (tables, figures) in the Results section and providing more in-depth interpretation of findings in the Discussion section would enhance the paper's clarity and impact.

A: Based on your journal's instruction, the whole manuscript was re-evaluated and tables were added in the results section.

2- *The abstract could be more structured for better readability. Study design should be mentioned in first line of method section of ABSTRACT.*

A: Considered and corrected with respect. Moreover, some statements were added to some parts of abstract in order to improve its fluency (Highlighted)

3- *This research contributes to our understanding of post-COVID cognitive disorders and their predictors, which is a crucial area of study given the long-term health implications of COVID-19. With some minor revisions, this manuscript has the potential to be a valuable addition to the scientific literature in this field.*
A: Dear EIC,
This is a great honor for us to participate in the reviewing process of your journal. Undoubtedly, the valuable experiences of you and your colleagues will be effective in improving the present study.
Based on your and colleagues' valuable comments, the entire

manuscript was revised (revised sections highlighted). However, we are fully ready for any potential further amendments or revisions.
Kindest regards

Screenshot of the list of reviewers' comments:

Reviewers' Comments:

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Reviewer 2:
accept

Associate Editor's Comments:

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This research contributes to our understanding of post-COVID cognitive disorders and their predictors, which is a crucial area of study given the long-term health implications of COVID-19. With some minor revisions, this manuscript has the potential to be a valuable addition to the scientific literature in this field.

EIC Decision:
Dear Author,
Thank you for submitting the article. it needs some revision. Please revise it based on Reviewers and AE comments.

Uploaded Files by Reviewers/Associate Editor/ or EIC: Below, you can find the list of files attached by reviewers or associate editor or EIC during the review process (if any).

No file

2 Revision 1

3 comments · 5 Nov 2023 – 5 Nov 2023

Referee 1 Reviewer

ACCEPT 5 Nov 2023

Dear AE,
Previous errors have been corrected, and there are no further recommendations.

Associate Editor

ACCEPT 5 Nov 2023

Dear EIC,
I reviewed the manuscript again. The great effort in improving the manuscript is highly appreciated.
The authors have addressed all comments.
Thank you

Editor-in-Chief

ACCEPT 5 Nov 2023

Dear authors.
Thanks for your valuable efforts in carefully revising the manuscript.