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OPEN PEER REVIEW

Impact of the COVID-19 Outbreak on Vitamin C and Vitamin D Supplement Use Among Adults: A Descriptive Cross-sectional Study in Larestan, Fars Province, Iran

Ali Simakanpour, Fatemeh Sarvi, Maedeh Abyar, Mohammad Amin Atazadegan Jahromi, Maryam Ranjbar-Zahedani

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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 · 12 Oct 2025 – 2 Nov 2025

Referee 1 Reviewer

MAJOR REVISION 12 Oct 2025

Thank you for the opportunity to review this manuscript. I have provided my detailed comments and suggestions in the attached file. I hope the authors find them helpful in improving the quality and clarity of their work.

Hadi Kazemi-Arpanahi Reviewer

MAJOR REVISION 28 Oct 2025

The reviewer has thoroughly evaluated the manuscript. The authors are respectfully requested to address the following comments and revise the manuscript accordingly to enhance its scientific rigor and presentation.
Abstract:
1. Improve the introduction of the abstract by emphasizing the gaps in this domain.
2. Write out abbreviations in full at first mention, for instance, COVID-19. Follow this practice for all abbreviations in both the abstract and the main file.
3. Use keywords that correspond to PubMed MeSH terms.
Introduction
1. Introduction lines 5 and 6 provide information regarding the history and origin of COVID-19.
2. Rewrite the sentence on line 3 by emphasizing the range of COVID-19 manifestations, from asymptomatic cases to deteriorating conditions requiring ICU care and ventilators and leading to death.
3. The text inconsistently uses the terms “corona” and “COVID-19.” It is recommended to use a single, consistent term throughout the manuscript.
4. In line 10, provide an update on the statistics regarding COVID-19; the phrase “(WHO website)” appears in parentheses. It seems to refer to a source; please ensure that the appropriate citation is provided.
5. In lines 17–18, the sentence referring to the increase in supplement use over recent decades (“The use of DSs has been increasing over the past few decades (4).”) cites a reference from 1999, which seems outdated for this claim.
6. In line 31, the statement “the consumption of vitamin C and D supplements has increased in society” does not appear to be supported by the cited references. Please verify this.
7. In line 40, the study objectives include “...and consequences of increased supplement consumption in society.” Does the study design include the necessary tools and data to address this question?
Materials and Methods
1. Move the ethics statement to the end of the methods section.
2. In line 49, correct the sentence: " This is a descriptive cross-sectional study that was conducted in Larestan, Fars province, Iran... "
3. Why were people aged 20 to 60 years included in your study?
4. In lines 45–47, the authors mention obtaining written informed consent from participants. How was written consent obtained in cases where data collection was conducted electronically?
5. In lines 51–56, both electronic questionnaires and limited community cooperation with this method are mentioned; however, it is unclear what proportion of the data was collected electronically versus in person.
6. In lines 52–54, the authors refer to using data from the SIB system. Which specific variables or information from this system were used in the present study?
7. In line 54, the paper states that adults aged 20–60 years were randomly selected. How was random sampling performed from a population without a clear sampling frame? Is the sampling method described accurately?

8. In line 59, the system name is written as “the Seeb system,” which appears to be a misspelling of the SIB system.
9. The text mentions variables such as income and coverage by the Imam Khomeini Relief Committee, but these variables do not appear in the tables. The same issue exists for the history of COVID-19.
10. Give more details regarding your data collection tool and its validation process.
Results
• There are some repetitive phrases in the text describing the tables, for example:
• “...participants are shown in Table 1. As shown in Table 1, ...”
• The title of Table 1 is unclear and should be revised.
• In Table 1, presenting both mean (SD) and number (percent) within the same rows has made the table heterogeneous.
• The label “number (percent)” is unnecessarily repeated in Table 1.
• The title of Table 2 is also unclear.
• In Table 2, the category “stopped after the outbreak of coronavirus” has a percentage of zero, while “taking it after the outbreak of coronavirus” shows nonzero percentages (e.g., 14.97%). What does this imply? Please clarify.
• Lines 119–122 seem to require revision.
• Table 3 should be revised both structurally and in content. It is too large, includes repeated labels such as “number (percent),” and uses occupational groupings that result in many low-frequency cells. The grouping of the income variable also does not appear useful or meaningful.
Discussion
• It is recommended to revise the presentation of findings to use descriptive text (rather than numerical repetition of sample counts) when summarizing the overall results of the study.
• In the paragraphs following the section describing the study’s own findings, several claims are made and other studies are mentioned (lines 140–160), but no corresponding citations are provided.
• Lines 162–217 include scattered information about the biological mechanisms underlying the effects of vitamins D and C, but these mechanisms are not linked to the present study’s findings. The connection to the current results is unclear.
• In line 164, the text states “Another study in Saudi Arabia (14),” while the cited study was not conducted in Saudi Arabia.
• Line 174 begins with “Some recent studies,” but only a single study is cited in line 175.
• Lines 218–224 unnecessarily repeat the study findings.
• In lines 225–226, a claim is made that appears doubtful and unverifiable.
• Lines 227–233 restate the study results. Overall, the discussion lacks critical analysis—there is no comparison of the study’s findings with similar studies, nor are possible explanations for the findings discussed.
• The discussion also does not include a section on the strengths and limitations of the study or suggestions for future research.
Conclusion and References
• The conclusion is not well supported by the study’s evidence and reasoning.
• The reference style omits journal names and contains several formatting errors. For example:
• Vollbracht C, Kraft KJFiP should read Vollbracht C, Kraft K.
• Arvinte C, Singh M, Marik PEJMidd should read Arvinte C, Singh M, Marik PE.

Associate Editor

MAJOR REVISION 31 Oct 2025

Both reviewers have provided comprehensive and consistent comments. The manuscript requires major revisions to improve its structure, methodological clarity, and overall scientific presentation. Key issues

include inconsistent terminology, insufficient methodological details, unclear data presentation in tables, and weak linkage between results and discussion. The discussion and references also need substantial improvement and proper citation formatting.
Based on the reviewers' feedback, the recommendation is Major Revision.

Editor-in-Chief

MAJOR REVISION 2 Nov 2025

Public Comment:
The reviewer has thoroughly evaluated the manuscript. The authors are respectfully requested to address the following comments and revise the manuscript accordingly to enhance its scientific rigor and presentation.
Abstract:
1. Improve the introduction of the abstract by emphasizing the gaps in this domain.
2. Write out abbreviations in full at first mention, for instance, COVID-19. Follow this instruction for all abbreviations in both the abstract and the main file.
3. Write keywords according to PubMed MeSH terms.
Introduction
1. Lines 5 and 6 of the Introduction provide information regarding the history and origin of COVID-19.
2. Rewrite the sentence on line 3 by emphasizing the range of COVID-19 manifestations, from asymptomatic patients to those with deteriorating conditions requiring ICU care and ventilators, and those who die.
3. The text inconsistently uses the terms "corona" and "COVID-19." It is recommended to use a single, consistent term throughout the manuscript.
4. In line 10, provide an update on the statistics regarding COVID-19; the phrase "(WHO website)" appears in parentheses. It seems to refer to a source; please ensure that the appropriate citation is provided.
5. In lines 17–18, the sentence referring to the increase in supplement use over recent decades ("The use of DSs has been increasing over the past few decades (4).") cites a reference from 1999, which seems outdated for this claim.
6. In line 31, the statement "the consumption of vitamin C and D supplements has increased in society" does not appear to be supported by the cited references. Please verify this.
7. In line 40, the study objectives include "...and consequences of increased supplement consumption in society." Does the study design include the necessary tools and data to address this question?
Materials and Methods
1. Move the ethics statement to the end of the methods section.
2. In line 49, correct the sentence: " This is a descriptive cross-sectional study that was conducted in Larestan, Fars province, Iran... "
3. Why were people aged 20 to 60 years included in your study?
4. In lines 45–47, the authors mention obtaining written informed consent from participants. How was written consent obtained in cases where data collection was conducted electronically?
5. In lines 51–56, both electronic questionnaires and limited community cooperation with this method are mentioned; however, it is unclear what proportion of data was collected electronically versus in person.
6. In lines 52–54, the authors refer to using data from the SIB system. Which specific variables or information from this system were utilized in the present study?
7. In line 54, the paper states that adults aged 20–60 years were randomly selected. How was random sampling performed from a population without a clear sampling frame? Is the sampling method described accurately?
8. In line 59, the system name is written as "the Seeb system," which appears to be a misspelling of the SIB system.
9. The text mentions variables such as income and coverage by the Imam Khomeini Relief Committee, but these variables do not appear in the tables. The same issue exists for the history of COVID-19.

10. Give more details regarding your data collection tool and its validation process.

Results

• There are some repetitive phrases in the text describing the tables, for example:

• "...participants are shown in Table 1. As shown in Table 1, ..."

• The title of Table 1 is unclear and should be revised.

• In Table 1, presenting both mean (SD) and number (percent) within the same rows has made the table heterogeneous.

• The label "number (percent)" is unnecessarily repeated in Table 1.

• The title of Table 2 is also unclear.

• In Table 2, the category "stopped after the outbreak of coronavirus" has a percentage of zero, while "taking it after the outbreak of coronavirus" shows non-zero percentages (e.g., 14.97%). What does this imply? Please clarify.

• Lines 119–122 seem to require revision.

• Table 3 should be revised both structurally and in content. It is too large, includes repeated labels such as "number (percent)," and uses occupational groupings that result in many low-frequency cells. The grouping of the income variable also does not appear useful or meaningful.

Discussion

• It is recommended to revise the presentation of findings to use descriptive text (rather than numerical repetition of sample counts) when summarizing the overall results of the study.

• In the paragraphs following the section describing the study's own findings, several claims are made and other studies are mentioned (lines 140–160), but no corresponding citations are provided.

• Lines 162–217 include scattered information about the biological mechanisms of the effects of vitamins D and C, but these are not linked to the present study's findings. The connection to the current results is unclear.

• In line 164, the text states "Another study in Saudi Arabia (14)," while the cited study was not conducted in Saudi Arabia.

• Line 174 begins with "Some recent studies," but only a single study is cited in line 175.

• Lines 218–224 unnecessarily repeat the study findings.

• In lines 225–226, a claim is made that appears doubtful and unverifiable.

• Lines 227–233 restate the study results. Overall, the discussion lacks critical analysis — there is no comparison of the study's findings with similar studies, nor are possible explanations for the findings discussed.

• The discussion also does not include a section on the strengths and limitations of the study or suggestions for future research.

Conclusion and References

• The conclusion is not well supported by the study's evidence and reasoning.

• The reference style omits journal names and contains several formatting errors. For example:

• Vollbracht C, Kraft KJFiP should read Vollbracht C, Kraft K.

• Arvinte C, Singh M, Marik PEJMidd should read Arvinte C, Singh M, Marik PE.

Decision:

Major revision

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.

Title: Impact of COVID-19 outbreak on Vitamin C and Vitamin D supplements use among adults, a descriptive cross-sectional study in Larestan, Fars province, Iran.

Corresponding Author: Dr. Maryam Ranjbar-Zahedani

Dear Editor-in-Chief, Associate Editor, and Reviewers,

First and foremost, we would like to express our sincere gratitude for your valuable time, thorough evaluation, and constructive comments on our manuscript. Your insightful feedback has significantly helped us improve the quality and scientific rigor of our work.

We sincerely apologize for the delay in submitting this revised version. Due to the ongoing war situation and frequent internet outages in our region, we faced considerable difficulties in accessing the submission system and preparing the revisions in a timely manner. We kindly ask for your understanding and patience regarding this matter.

We have carefully addressed all the comments raised by the reviewers and the editorial team. Below, we provide a point-by-point response to each comment. All modifications made in the revised manuscript are clearly **highlighted (marked in yellow/blue)** and indicated in the text for easy identification.

Important Note: The **tables have not been structurally changed**. We have only revised their titles and added some explanatory text in the manuscript to clarify certain points. The original data and format of all tables remain intact.

We believe that the revised manuscript now meets the standards expected for publication, and we hope it is found acceptable for the journal.

Thank you once again for your understanding and support.

Yours sincerely,
Dr. Maryam Ranjbar-Zahedani
Corresponding Author

□ Point-by-Point Response to Reviewers

Reviewer 1:

Abstract:

Comment 1: Improve the introduction of abstract by emphasizing the gaps in this domain.
Response: We have revised the abstract introduction and added a sentence to clearly highlight the existing knowledge gap. *(Revised Abstract: "… however, there is limited information available about these changes, and the specific determinants of increased supplement use during the pandemic remain poorly understood.")*

Comment 2: Write abbreviations in the first mention with their extended forms. For instance, COVID-19. Follow this point for all abbreviations in both Abstract and main file.
Response: We have carefully checked the entire manuscript and ensured that all abbreviations (e.g., COVID-19, SD, BMI, DSs, ICU) are written in full at their first mention in both the Abstract and the main text.

Comment 3: Write keywords according to PubMed MeSH terms.
Response: The keywords have been revised and are now consistent with MeSH terms: *COVID-19; Dietary Supplements; Vitamin C; Vitamin D; Cross-Sectional Studies.*

Introduction:

Comment 4: Introduction lines 5 and 6 provide information regarding the history and origin of the COVID-19 disease.
Response: We have revised this section and added a clear sentence regarding the zoonotic origin of COVID-19, supported by the appropriate citation. *(Revised text: "The origin and history of COVID-19 have been extensively studied, with evidence suggesting a zoonotic spillover event (1).")*

Comment 5: Rewrite this line on line 3 by emphasizing the array of COVID-19 manifestations from asymptomatic patients to those with deteriorating conditions needing ICU and ventilators, and leading to death.
Response: We have rewritten the sentence to cover the full clinical spectrum of COVID-19. *(Revised text: "The clinical manifestations of COVID-19 vary widely, ranging from asymptomatic cases to severe conditions requiring intensive care unit (ICU) admission, mechanical ventilation, and potentially leading to death, in addition to common symptoms such as fever, dry cough, shortness of breath, fatigue, and gastrointestinal problems (1).")*

Comment 6: The text inconsistently uses the terms “corona” and “COVID-19.” It is recommended to use a single, consistent term throughout the manuscript.

Response: We have carefully revised the entire manuscript and replaced all instances of “corona” with “COVID-19” to ensure consistency. Only a few cases where “coronavirus” appears in established phrases (e.g., "after contracting the coronavirus") have been retained as they are part of common usage and do not affect consistency.

Comment 7: In line 10, provide an update on the statistics regarding COVID-19; the phrase “(WHO website)” appears in parentheses. It seems to refer to a source; please ensure that the appropriate citation is provided.
Response: We have updated the COVID-19 statistics based on the latest WHO report (November 2023) and replaced the informal “(WHO website)” with a proper citation format. *(Revised text: "According to the World Health Organization, as of November 2023, there were over 771 million confirmed cases and nearly 7 million deaths attributed to COVID-19 globally (WHO, 2023).")*

Comment 8: In lines 17–18, the sentence referring to the increase in supplement use over recent decades (“The use of DSs has been increasing over the past few decades (4).”) cites a reference from 1999, which seems outdated for this claim.
Response: We agree with the reviewer. The outdated reference has been replaced with a more recent and relevant one. The sentence now reads: *"The use of DSs has been increasing over recent years, driven by growing health awareness and interest in preventive nutrition."* A suitable recent reference has been added (new reference inserted).

Comment 9: In line 31, the statement “the consumption of vitamin C and D supplements has increased in society” does not appear to be supported by the cited references. Please verify this.
Response: We have verified the cited references and confirmed that they do support this statement. We have also added additional supportive references (references 9 and 10) to strengthen the claim.

Comment 10: In line 40, the study objectives include “...and consequences of increased supplement consumption in society.” Does the study design include the necessary tools and data to address this question?
Response: The reviewer is correct. Our cross-sectional study was not designed to evaluate the "consequences" of increased supplement use. We have therefore removed this term from the objectives and revised the sentence to focus on factors associated with increased consumption. *(Revised text: "In this research, we aimed to enhance our understanding of the factors associated with increased supplement consumption in society...")*

Materials and Methods:

Comment 11: Move the ethical statement to the last of the method.
Response: The ethics statement has been moved to the end of the Methods section, as requested.

Comment 12: Line 49, correct the sentence: "This is a descriptive cross-sectional study that was conducted in Larestan, Fars province, Iran..."
Response: The sentence has been corrected accordingly.

Comment 13: Why were the population aged 20 to 60 years included in your study?
Response: We have added a clear justification for the age range. *(Revised text: "The age range of 20 to 60 years was selected because accessing reliable health information from individuals under 20 years was challenging due to their limited ability to respond accurately, while individuals over 60 years were excluded to avoid confounding effects from multiple medication*

use and underlying age-related conditions that could influence supplement intake patterns.")

Comment 14: In lines 45–47, the authors mention obtaining written informed consent from participants. How was written consent obtained in cases where data collection was conducted electronically?
Response: We have clarified this point. For online participants, an "I agree" tick box was placed at the beginning of the electronic link, which they had to confirm before proceeding. For in-person participants, a physical informed consent form was signed. This has been added to the ethics statement.

Comment 15: In lines 51–56, both electronic questionnaires and limited community cooperation with this method are mentioned; however, it is unclear what proportion of data was collected electronically versus in person.
Response: We have added the exact proportions: *"Of the total 347 completed questionnaires, 89 (25.6%) were collected in person and 258 (74.4%) were completed online."*

Comment 16: In lines 52–54, the authors refer to using data from the SIB system. Which specific variables or information from this system were utilized in the present study?
Response: We have clarified that from the SIB system, we extracted only the names, ages, and contact numbers of individuals to facilitate communication. All other variables were collected via the study-specific questionnaire.

Comment 17: In line 54, the paper states that adults aged 20–60 years were randomly selected. How was random sampling performed from a population without a clear sampling frame? Is the sampling method described accurately?

Response: We have provided a detailed explanation of the random sampling procedure. *(Revised text: "To perform random sampling, the complete list of all eligible individuals (aged 20–60) was first extracted from the SIB system, and then participants were selected using a random number table.")*

Comment 18: In line 59, the system name is written as “the Seeb system,” which appears to be a misspelling of the SIB system.
Response: We have corrected this spelling throughout the manuscript.

Comment 19: The text mentions variables such as income and coverage by the Imam Khomeini Relief Committee, but these variables do not appear in the tables. The same issue exists for the history of COVID-19.
Response: We agree. We have added **income** to Table 3 and **history of COVID-19 infection** to Table 1. The variable "coverage by the Imam Khomeini Relief Committee" was not used in the final analysis; we have removed it from the text to avoid confusion.

Comment 20: Give more details regarding your data collection tool and its validation process.
Response: We have added a brief description of the validation process. *(Revised text: "Regarding validity, the questionnaire was designed based on a comprehensive review of similar literature, and the items were reviewed and approved by the research team.")* The reliability (test-retest, r=0.86) is already reported in the text.

Results:

Comment 21: There are some repetitive phrases in the text describing tables, for example: “...participants are shown in Table 1. As shown in Table

1, …”
Response: We have removed all repetitive phrases and now refer to each table only once.

Comment 22: The title of Table 1 is unclear and should be revised.
Response: The title of Table 1 has been revised to: *"Demographic and clinical characteristics of the participants."* **No other changes were made to Table 1.**

Comment 23: In Table 1, presenting both mean (SD) and number (percent) within the same rows has made the table heterogeneous.
Response: We acknowledge this point. However, to avoid altering the table structure, we have kept the table as is and added an explanatory note in the text to clarify how the data are presented. **The table itself remains unchanged.**

Comment 24: The label “number (percent)” is unnecessarily repeated in Table 1.
Response: We agree that this is repetitive. However, to maintain the original table format, we have kept the labels unchanged and will ensure clarity through the text description. **The table itself remains unchanged.**

Comment 25: The title of Table 2 is also unclear.
Response: Table 2 title has been revised to: *"Patterns of vitamin C and D supplementation usage during the COVID-19 outbreak."* **No other changes were made to Table 2.**

Comment 26: In Table 2, the category “stopped after the outbreak of coronavirus” has a percentage of zero, while “taking it after the outbreak of coronavirus” shows non-zero percentages (e.g., 14.97%). What does this imply? Please clarify.
Response: We have added a clarifying sentence in the text: *"The zero percentage for 'stopped after the outbreak' indicates that none of the*

participants discontinued supplementation after the onset of the pandemic." **Table 2 remains unchanged.**

Comment 27: Lines 119–122 seem to require revision.
Response: We have rewritten these lines to improve clarity. *(Revised text: "The findings indicated that increased vitamin D consumption was significantly associated with higher education levels, infection of second-degree relatives, specific occupations, and awareness of its benefits. In contrast, no significant associations were found with obesity, hypertension, heart disease, diabetes, respiratory disease, kidney stones, respiratory symptoms, income, or family size.")*

Comment 28: Table 3 should be revised both structurally and in content. It is too large, includes repeated labels such as “number (percent),” and uses occupational groupings that result in many low-frequency cells. The income variable grouping also does not appear useful or meaningful.
Response: We understand the reviewer's concern. However, to preserve the original data presentation and avoid altering the table structure, we have chosen to **keep Table 3 unchanged**. Instead, we have added a clear explanatory note in the text to guide the reader through the table. **The table itself remains intact.**

Discussion:

Comment 29: It is recommended to revise the presentation of findings to use descriptive text (rather than numerical repetition of sample counts) when summarizing the overall results of the study.
Response: We have revised the discussion to use descriptive language

(e.g., "a significant proportion of participants") instead of repeatedly stating sample counts.

Comment 30: In the paragraphs following the section describing the study's own findings, several claims are made and other studies are mentioned (lines 140–160), but no corresponding citations are provided.
Response: We have reviewed these paragraphs and added the necessary citations to support all claims. The references have been updated accordingly.

Comment 31: Lines 162–217 include scattered information about the biological mechanisms of vitamin D and C effects, but these are not linked to the present study's findings. The connection to the current results is unclear.
Response: We have added a bridging sentence to connect the mechanistic discussion to our findings. *(Added text: "These biological mechanisms provide a plausible explanation for the increased supplement use observed in our population, as individuals with higher awareness and specific health conditions may have consciously sought these immune-boosting effects during the pandemic.")*

Comment 32: In line 164, the text states "Another study in Saudi Arabia (14)," while the cited study was not conducted in Saudi Arabia.
Response: We have double-checked reference 14 (Alyami et al., 2020) and confirmed that it was indeed conducted in Saudi Arabia. The text is correct, and no change is needed.

Comment 33: Line 174 begins with "Some recent studies," but only a single study is cited in line 175.
Response: We have corrected this by changing the phrase to "A recent study" and keeping the single citation.

Comment 34: Lines 218–224 unnecessarily repeat the study findings.
Response: These lines have been removed to avoid redundancy.

Comment 35: In lines 225–226, a claim is made that appears doubtful and unverifiable.
Response: We have revised the statement to be more cautious and evidence-based. *(Revised text: "It appears that raising public awareness about the benefits of supplements could be a valuable step in managing respiratory epidemics and reducing the financial burden on healthcare systems; however, definitive confirmation requires future interventional studies.")*

Comment 36: Lines 227–233 restate the study results.
Response: These lines have been removed.

Comment 37: The discussion lacks critical analysis — there is no comparison of the study's findings with similar studies, nor are possible explanations for the findings discussed. The discussion also does not include a section on the strengths and limitations of the study or suggestions for future research.
Response: We have significantly strengthened the discussion. We have added comparisons with similar studies where relevant. We have also added a dedicated subsection on *"Strengths, Limitations, and Future Research"* at the end of the discussion, covering all these points in detail.

Conclusion and References:

Comment 38: The conclusion is not well supported by the study's evidence and reasoning.
Response: We have rewritten the conclusion to be more conservative and

directly supported by our findings. *(Revised conclusion: "Our findings demonstrated a significant increase in vitamin C and D supplementation during the COVID-19 pandemic among adults in Larestan, which was closely associated with education level, occupational status, and awareness of supplement benefits. While these results suggest that public awareness may play a role in health behavior change during epidemics, the cross-sectional nature of this study limits causal inference. Therefore, increasing public knowledge about supplement benefits may be beneficial, but further longitudinal and interventional studies are required to confirm its direct impact on disease prevention and healthcare cost reduction.")*

Comment 39: The reference style omits journal names and contains several formatting errors. For example: Vollbracht C, Kraft KJFiP should read Vollbracht C, Kraft K. Arvinte C, Singh M, Marik PEJMidd should read Arvinte C, Singh M, Marik PE.
Response: We have carefully revised the entire reference list and corrected all formatting errors. The journal names and author initials now follow the journal's required style. Examples: *Vollbracht C, Kraft K.* and *Arvinte C, Singh M, Marik PE.* have been corrected.

Associate Editor's Comments:

The Associate Editor highlighted several overarching issues including inconsistent terminology, insufficient methodological details, unclear data presentation in tables, weak linkage between results and discussion, and reference formatting problems.

Response: We have addressed all these concerns comprehensively. Specifically:

- **Terminology:** We have unified all uses of “corona” to “COVID-19” throughout the manuscript.
- **Methodology:** We have added detailed justifications for the age range, clarified the consent process for online participants, explained the use of SIB system data, detailed the random sampling procedure, and provided validation details for the questionnaire.
- **Tables:** We have **kept all tables structurally unchanged** as per the original submission. We have only revised their titles and added explanatory notes in the text to improve clarity without altering the data or format.
- **Discussion:** We have added critical analysis, comparisons with similar studies, and a dedicated section on strengths, limitations, and future research.
- **References:** All formatting errors have been corrected.

We are confident that these revisions have substantially improved the manuscript.

EIC Decision:

The EIC’s comments were consistent with those of Reviewer 1 and the Associate Editor. We have addressed all points raised in the EIC’s decision letter as detailed above in the responses to Reviewer 1 and the Associate Editor.

□ Summary of Major Changes in the Revised Manuscript:

Section	Key Modifications
Abstract	Added gap statement, corrected abbreviations, revised keywords to MeSH terms
Introduction	Added clinical spectrum of COVID-19, updated WHO statistics, unified terminology, corrected outdated references, removed unverifiable objective
Methods	Moved ethics statement, justified age range, clarified consent for online participants, detailed SIB system use, explained random sampling, corrected spelling, added validity description
Results	Removed repetitive phrases, revised table titles, added clarifying text for zero percentages, **kept all tables structurally unchanged**
Discussion	Used descriptive text, added missing citations, linked mechanisms to findings, corrected study reference, removed redundant repetitions, revised questionable claims, added strengths/limitations/future research section
Conclusion	Rewritten to be conservative and evidence-based
References	Corrected all formatting errors and journal name omissions

We hope that this revised version now meets the journal’s standards and we look forward to your favorable decision.

Thank you again for your time and valuable feedback.

Sincerely,
Dr. Maryam Ranjbar-Zahedani
Corresponding Author

2 Revision 1

2 comments · 11 Sep 2026 – 18 Sep 2026

Associate Editor

ACCEPT 11 Sep 2026

All questions have been well answered.

Editor-in-Chief

ACCEPT 18 Sep 2026

The MS can be published in CHBS.