Middle East Journal of Rehabilitation and Health Studies
Volume 11 · Issue 4 · e143955

OPEN PEER REVIEW

Comparative Analysis of Serum and Saliva Iron, Ferritin, and TIBC in Women with Iron Deficiency Anemia: Highlighting Saliva's Screening Potential

Taraneh Farrokhnia, Reyhaneh Shoorgashti, Mohammadreza Sadeghian, Shahab Hasanzade, Simin Lesan, Mahdi Hedayati

SUBMITTED	REVISED	ACCEPTED	DOI
13 Dec 2023	12 Jun 2024	22 Jun 2024	10.5812/mejrh-143955

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

Contents

1 **Original submission** Referee 1, Associate Editor, Editor-in-Chief 2
2 **Revision 1** Referee 2, Associate Editor, Editor-in-Chief 4
Authors' reply to reviewers 5
Reviewer and editor comments 8
3 **Revision 2** Referee 2, Associate Editor, Editor-in-Chief 11
Authors' reply to reviewers 12
Reviewer and editor comments 17

1 Original submission

3 comments · 6 Jan 2024 – 8 Jan 2024

Referee 1 Reviewer

MAJOR REVISION 6 Jan 2024

1. What are the benefits and drawbacks of employing saliva as a monitoring medium for iron levels in relation to the well-established serum analysis method as described in the literature that is now available?
2. How may individuals' periodontal health impact the precision and dependability of determining iron levels using saliva samples? In what ways may future research approaches address or counteract these possible influences?
3. In light of the study's contradictory results, which showed substantial variations in ferritin and serum iron levels but not in the equivalent saliva levels, what effect would this have on the clinical use of saliva analysis in the detection and surveillance of iron deficiency anemia? What other factors or lines of inquiry could enhance the usefulness of saliva analysis in this particular situation?
4. The study excluded subjects with various conditions, such as hemoglobinopathies and infections, as well as those on specific medications. How might the exclusion criteria affect the generalizability of the study's results to broader populations, particularly in diagnosing or monitoring iron deficiency anemia through salivary analysis?
5. Examine the ramifications of the non-significant variations in iron and ferritin levels in saliva samples, in contrast to the statistically significant difference in TIBC levels between the anemic and healthy groups. What potential effects can this disparity have on the accuracy of saliva-based diagnostic tools used to identify iron deficiency anemia?
6. Examine the implications of discovering statistically significant variations in serum ferritin and iron levels between anemic and healthy individuals, but not in saliva. What factors, particularly in relation to the selection of the sample medium for analysis, should be taken into account when interpreting these disparities in the context of diagnosing iron deficiency anemia?
7. Assess the claim that "examining both saliva and serum components when assessing iron status provides a comprehensive understanding of nuanced variations." Discuss the complementary roles of different media in diagnosing and monitoring iron deficiency anemia, highlighting the significance of a multi-modal approach in clinical evaluations in light of the disparities in results between saliva and serum analysis in this study.

Associate Editor

MAJOR REVISION 6 Jan 2024

Title: Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis

Middle East Journal of Rehabilitation and Health Studies

Thank you for your interest in publishing an article in the Middle East Journal of Rehabilitation and Health Studies.

The review process for your manuscript, "Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis," has been completed.
At this time, we ask that you consider making revisions to your paper in accordance with the reviewers' recommendations.

Sincerely,

Monir Nobahar (BScN, MScN, Ph.D)
Associate Editor
Middle East Journal of Rehabilitation and Health Studies

Editor-in-Chief

MAJOR REVISION 8 Jan 2024

Dear Authors
According to the reviewers' and associate editor's comments, your article needs major revision. When revising your manuscript, please consider all issues mentioned in the reviewers' comments carefully: please outline every change made in response to their comments and submit the required files.

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.

“Peer Review”

Manuscript ID: 143955
Title: Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis

Dear Dr. Ehsani,

Thank you for giving me the opportunity to submit a revised draft of my manuscript. We appreciate the time and effort that you and the reviewers have dedicated to providing your valuable feedback on the manuscript, and we are grateful to the reviewers for their insightful comments on my paper. We have been able to incorporate changes to reflect the suggestions provided by the reviewers. We have highlighted the changes within the manuscript. Here is a point-by-point response to the reviewers’ comments and concerns:

Reviewer comments
****
Reviewer 1:

1. What are the benefits and drawbacks of employing saliva as a monitoring medium for iron levels in relation to the well-established serum analysis method as described in the literature that is now available?
Response: with many thanks, the discussion section now includes separate paragraphs discussing the benefits and challenges of using saliva as a monitoring medium for detecting iron deficiency (lines 126-128 and lines 149-151). We also mentioned the potential drawbacks of using serum analysis based on the literature (lines 121-125).

2. How may individuals' periodontal health impact the precision and dependability of determining iron levels using saliva samples? In what ways may future research approaches address or counteract these possible influences?
Response: thank you for your valuable comment. The influence of periodontal health status on the results of analyzing saliva and serum has been added to the manuscript (lines 162-170).

3. In light of the study's contradictory results, which showed substantial variations in ferritin and serum iron levels but not in the equivalent saliva levels, what effect would this have on the clinical use of saliva analysis in the detection and surveillance of iron deficiency anemia? What other factors or lines of inquiry could enhance the usefulness of saliva analysis in this particular situation?
Response: thank you for your valuable feedback. This part has been added to the discussion (lines 139-151).

4. The study excluded subjects with various conditions, such as hemoglobinopathies, infections, and those on specific medications. How might the exclusion criteria affect the generalizability of the study's results to broader populations, particularly in diagnosing or monitoring iron deficiency anemia through salivary analysis?

Response: thank you for your valuable comment. We have discussed this limitation in our report (lines 156-161).

5. Examine the ramifications of the non-significant variations in iron and ferritin levels in saliva samples, in contrast to the statistically significant difference in TIBC levels between the anemic and healthy groups. What potential effects can this disparity have on the accuracy of saliva-based diagnostic tools used to identify iron deficiency anemia?

Response: with many thanks, this part has been added to the discussion (lines 139-151).

6. Examine the implications of discovering statistically significant variations in serum ferritin and iron levels between anemic and healthy individuals, but not in saliva. What factors, particularly in relation to the selection of the sample medium for analysis, should be taken into account when interpreting these disparities in the context of diagnosing iron deficiency anemia?

Response: with many thanks, it has been added to the discussion (lines 139-155).

7. Assess the claim that "examining both saliva and serum components when assessing iron status provides a comprehensive understanding of nuanced variations." Discuss the complementary roles of different mediums in diagnosing and monitoring iron deficiency anemia, highlighting the significance of a multi-modal approach in clinical evaluations in light of the disparities in results between saliva and serum analysis in this study.

Response: thank you for your valuable comment. The discussion section has been completely rewritten (lines 117-170).

****

Reviewer 2:

Following are some suggestions for the further improvement of the manuscript:

Comment 1: there are some word selections and punctuation that need improving. The authors need to ask someone with a strong (er) comprehension of English to give it a once over.

Response: Thank you for your valuable comment. After using Microsoft Word and Grammarly’s premium version for spelling and grammar checks, an English expert revised the manuscript's final version.

Comment 2: What is the novelty of your work? There are similar research works such as " Jazaeri, M.; Radi, S.; Hajilooi, M.; Seifrabiei, M. A.; Esmaeili, A., Comparison of Salivary Iron and Total Iron-Binding Capacity Levels Between Patients With Iron Deficiency Anemia and Healthy Individuals. Avicenna Journal of Dental Research 2023, 15 (1), 1-4."

Response: We analyzed three key measures that are crucial in examining iron deficiency levels, which is more comprehensive than other studies that typically only analyze one or two factors. In addition, previous studies such as Jazaeri's study did not exclude or analyze several vital confounding factors such as pregnancy, menstruation, or menopause, which can affect results. In our study, participants who were pregnant, or being in menstruation and menopause were excluded to mitigate the influence of confounding factors. Additionally, the sample size of Jazaeri's study is smaller compared to our presented study.

Comment 3: In part Authors' Contribution: drafting of the manuscript: R. Sh, and R. Sh.,; R. Sh is repeated twice

Response: Thank you for your comment. The repetition has been removed.

Comment 4: This way of using references in the manuscript does not seem correct. The reference of each related text should be given in its appropriate. In other words, it is not correct to write 8 unrelated references for a long paragraph such as (1-3, 5-8). (1, 2, 4, 9-13). Not all of the references explain the

given text mentioned in this manuscript. Reference number 14 does not explain anything about the deferiprone medication and it is also a Meta-Analysis study.

Response: The citations have been rewritten.

Comment 5: "measure for anemia in children are plentiful (11, 12, 14, 16, 17)" the ref. no 12 is not related to children.

Response: The mentioned citation has been deleted.

Comment 6: "While TIBC analysis in saliva is a relatively underexplored avenue, existing literature links salivary TIBC levels with candida infections, inflammatory conditions, and autoimmune diseases (23-28)"; there is no relationship between refs non 27 and 28 and the related part in the manuscript. These references do not mention anything about salivary TIBC levels.

Response: The mentioned citation has been deleted.

Comment 7: "The potential impact of inflammation on these markers, especially in high-infection areas, limits their applicability (17, 26, 31, 32)". Refs No. 17 and 26 are not related to inflammation or its effects on the chosen markers in the present study.

Response: The mentioned citation has been deleted.

Comment 8: A poor discussion is presented. Using the "Jazaeri, M.; Radi, S.; Hajilooi, M.; Seifrabiei, M. A.; Esmaeili, A., Comparison of Salivary Iron and Total Iron-Binding Capacity Levels Between Patients With Iron Deficiency Anemia and Healthy Individuals. Avicenna Journal of Dental Research 2023, 15 (1), 1-4" and other references help the authors write a more coherent and comprehensive discussion (pros and cons)/connection/comparison).

Response: The discussion section has been rewritten (lines 117-170).

Best regards

2 Revision 1

3 comments · 18 May 2024 – 20 May 2024

Referee 2 Reviewer

MINOR REVISION 18 May 2024

Chief Reviewer: Accept with minor revision
Dear Editor
Thank you for everything.
The manuscript now addresses all the comments relatively thoroughly and is well qualified. However, in my opinion, it still needs a minor revision:
- Most importantly, the manuscript requires English-language editing.
Below are some comments for each section of the paper:
1. Although the title is clear, it is suggested that it be made more informative with a sentence showing the main findings of the study.
2. The abstract conveys the message of the research paper properly.

3. The introduction does not provide a broad understanding of the topic. Specifically, the authors could provide more details about the changes in Iron, Ferritin, and TIBC in Serum and Saliva during anemia.

4. The sample size selection needs to be justified. Why 20? On what basis? Only based on Kodati's study?

5. The results section is complete and includes a sufficient number of Tables and a Figure. However, the section could be presented more clearly.

6. In the discussion section, the critical comparison with the work done by others could be presented properly. Add limitations of your study.

Good luck

Associate Editor

MAJOR REVISION 18 May 2024

Middle East Journal of Rehabilitation and Health Studies
Manuscript Title: Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis[Revision 1]

Thank you for submitting this manuscript for consideration by Middle East Journal of Rehabilitation and Health Studies. Your manuscript, "Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis", has now been assessed. While we cannot publish the manuscript in its current form, I invite you to revise the manuscript based on the comments from the reviewers below and then resubmit for further consideration.

Reviewer comments:
Introduction
1- Use of informal Language: For academic writing, the opening paragraph's use of the term "grapple with anemia" is somewhat informal. Precise language and a formal tone are expected in academic writing.
2- Unsupported Claims: The text makes reference to "recent initiatives" and "evidence suggests," but it doesn't go into more detail or offer any proof for these assertions.
3- The article highlights a significant gap in adult research on saliva as a diagnostic tool for anemia, raising questions about its implications for future studies and medical procedures.
Materials and methods

1. Which ethical considerations were covered in the study, and how were they incorporated into the methodology?
2. What statistical software was used to calculate the sample size, and how was it calculated for this study?
3. Which inclusion and exclusion standards were used to choose people for the control and anemic groups, and why were these standards thought to be significant?
4. Describe the steps involved in gathering and processing saliva samples, such as when to collect them, how to store them, and how they are analyzed in a lab.
5. Which statistical techniques were used to examine the data, and what level of significance was used for this study's statistical significance determination?
Results
1. Which statistical tests were applied to compare the amounts of components in serum and saliva samples between the anemic and healthy groups?
2. What are the consequences of this result for the study, and were there any statistically significant variations in the ages of the individuals between the two groups?
3. What were the key conclusions on serum and salivary levels of iron, ferritin, and TIBC, and how did they vary between the anemic and healthy groups?
Discussion
1. As stated in the discussion section, what are the primary disadvantages of the current gold standard technique for diagnosing anemia?
2. Despite the lack of significance in the comparison, what are the implications of the study's findings regarding the statistical significance of differences in saliva iron and ferritin levels between the anemic and healthy groups?
3. In the discussion section, how do the authors address the drawbacks of saliva-based diagnostic techniques, including the possibility of false-negative results?

Decision: Major revision

The manuscript has addressed all the comments relatively completely and is now well qualified. However, in my opinion, it still needs a minor revision:
- Most of all, the English writing in the manuscript needs to be checked.
Below are some comments for each section of the paper:
1. Although the title is clear, it is suggested that it be made more informative with a sentence showing the main findings of the study.
2. The abstract conveys the message of the research paper properly.
3. The introduction does not provide a broad understanding of the topic. Specifically, the authors could provide more details about the changes in iron, ferritin, and TIBC in serum and saliva during anemia.
4. The sample size selection needs to be justified. Why 20? On what basis? Only based on Kodati's study?
5. The results section is complete and includes a sufficient number of tables and a figure. However, the section could be presented more clearly.
6. In the discussion section, the critical comparison with the work done by others could be presented properly. Add limitations of your study.
Decision: Minor revision

Sincerely

Editor-in-Chief MAJOR REVISION 20 May 2024

revising your manuscript, please consider all issues mentioned in the reviewers' comments carefully: please outline every change made in response to their comments and submit the required files.

3

Revision 2

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.

“Peer Review”

Manuscript ID: 143955
Title: Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis

Dear Dr. Ehsani,

We are grateful for the feedback from you and the reviewers and have incorporated the suggested changes. Here is a point-by-point response to the reviewers' comments:

Reviewer comments
****

Reviewer 1:

Introduction

1- Use of informal Language: For academic writing, the opening paragraph's use of the term "grapple with anemia" is somewhat informal. Precise language and a formal tone are expected in academic writing.

Response: with many thanks, the manuscript revised based on your comments.

2- Unsupported Claims: The text makes reference to "recent initiatives" and "evidence suggests," but it doesn't go into more detail or offer any proof for these assertions.

Response: Thank you for your comment. This part is added to the manuscript (Lines 42-51).

3- The article highlights a significant gap in adult research on saliva as a diagnostic tool for anemia, raising questions about its implications for future studies and medical procedures.

Response: with many thanks, the manuscript revised based on your comments.

Materials and methods

1. Which ethical considerations were covered in the study, and how were they included into the methodology?

Response: thank you for your feedback. The project methodology was approved by the ethical committee (lines 67-69). The procedures and methodology were explained to the participants, and they were provided informed consent to sign (line 87).

2. What statistical software was used to calculate the sample size and how was it calculated for this study?

Response: thank you for your comments. The sample size was calculated based on a conducted study by Kodati’s study (18) using SPSS software with a 95% confidence interval and 80% test power (lines 71-73).

3. Which inclusion and exclusion standards were used to choose people for the control and anemic groups, and why were these standards thought to be significant?

Response: thank you for your comments. The eligibility criteria subheading has been added to the method section to describe inclusion and exclusion criteria (lines 93-103).

4. Describe the steps involved in gathering and processing saliva samples, such as when to collect them, how to store them, and how they are analyzed in a lab.

Response: thank you for your comments. The study procedure subheading has been added to the method section and the method section has been revised based on your comments (lines 105-113).

5. Which statistical techniques were used to examine the data, and what level of significance was used for this study's statistical significance determination?

Response: thank you for your comments. The statistical analysis subheading has been added to the method and this section has been revised based on your comments (lines 115-120).

Results

1. Which statistical tests were applied to compare the amounts of components in serum and saliva samples between the anemic and healthy groups?

Response: thank you for your comments. All statistical analysis information has been provided in lines 115-120) and in each table.

2. What are the consequences of this result for the study, and were there any statistically significant variations in the ages of the individuals between the two groups?

Response: thank you for your comments. The chi-square test revealed no statistically significant difference in the subjects' ages between the two groups (P-value=0·33) (line 125).

3. What were the key conclusions on serum and salivary levels of iron, ferritin, and TIBC, and how did they vary between the anemic and healthy groups?

Response: thank you for your comments. The result section has been revised based on your comment.

Discussion

1. As stated in the discussion section, what are the primary disadvantages of the current gold standard technique for diagnosing anemia?

Response: thank you for your comments. The disadvantages has been added to the manuscript (lines 150-153).

2. Despite the lack of significance in the comparison, what are the implications of the study's findings regarding the statistical significance of differences in saliva iron and ferritin levels between the anemic and healthy groups?

Response: thank you for your comments. The discussion section has been revised based on your comments (lines 145-206).

3. In the discussion section, how do the authors address the drawbacks of saliva-based diagnostic techniques, including the possibility of false-negative results?

Response: thank you for your comments. Saliva-based diagnostic tools that only measure these markers without considering TIBC may lack sensitivity and lead to false-negative results. So, integrating multiple diagnostic approaches and biomarkers may provide a more comprehensive assessment of iron status and improve the accuracy of anemia diagnosis.

****

Reviewer 2:

Chief Reviewer: Accept with minor revision

Dear Editor

Thanks for all

The manuscript is relatively addressed to all the comments completely, and is well qualified now. However, in my opinion, it needs still a minor revision:

- most of all the manuscript requires to check in English writing

Response: with many thanks, the manuscript revised based on your comments.

Below are some comments for each section of the paper:

1. Although the title is clear, it suggested being more informative with a sentence showing the main findings of the study.

Response: Thank you for your suggestion regarding the title. We have revised it to better reflect the main findings and their implications. The new title is 'Comparative Analysis of Serum and Saliva Iron, Ferritin, and TIBC in Women with Iron Deficiency Anemia: Highlighting Saliva's Screening Potential'.

2. The abstract conveys the message of the research paper properly.

Response: Thank you for your feedback.

3. The introduction does not provide a wide understanding about the topic. Specifically, the authors could provide more details about the changes of Iron, Ferritin, and TIBC in Serum and Saliva during anemia.

Response: Thank you for your comments. The details on the analyzed serum and saliva biomarkers have been added to the introduction section (lines 36-49).

4. It needs to justify the sample size selection. Why 20? On which basis? Only based on Kodati's study?

Response: thank you for your comments. The sample size was calculated using the statistical analysis software, SPSS software with a 95% confidence interval and 80% test power (lines 71-73).

5. The results section is complete and includes a sufficient number of Tables and a Figure. However, the section could be presented clearly.

Response: thank you for your comments. The result section has been revised.

6. The discussion section, the critical comparison to the work done by others could be presented properly. Add limitations of your study.

Response: thank you for your comments. The discussion has been revised and the limitations were added to the manuscript (lines 194-200)

Good luck

****

Associate Editor's Comments:

Associate Editor 1:
Middle East Journal of Rehabilitation and Health Studies
Manuscript Title: Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis[Revision 1]

Manuscript ID: 143955

Thank you for submitting this manuscript to for Middle East Journal of Rehabilitation and Health Studies consideration. Your manuscript, "Assessment of Serum and Salivary Iron, Ferritin, and TIBC in Women with and without Iron Deficiency Anemia: A Comparative Analysis", has now been assessed. While we cannot publish the manuscript in its current form, I invite you to revise the manuscript based on the comments from the reviewers below and then resubmit for further consideration.

Dear associate editor,

We revised the manuscript based on the reviewer comments and reply all comments one by one.

Reviewer comments:
Introduction

2- Use of informal Language: For academic writing, the opening paragraph's use of the term "grapple with anemia" is somewhat informal. Precise language and a formal tone are expected in academic writing.

Response: with many thanks, the manuscript revised based on your comments.

2- Unsupported Claims: The text makes reference to "recent initiatives" and "evidence suggests," but it doesn't go into more detail or offer any proof for these assertions.

Response: Thank you for your comment. This part is added to the manuscript (Lines 42-51).

3- The article highlights a significant gap in adult research on saliva as a diagnostic tool for anemia, raising questions about its implications for future studies and medical procedures.

Response: with many thanks, the manuscript revised based on your comments.

Materials and methods

1. Which ethical considerations were covered in the study, and how were they included into the methodology?

Response: thank you for your feedback. The project methodology was approved by the ethical committee (lines 67-69). The procedures and methodology were explained to the participants, and they were provided informed consent to sign (line 87).

2. What statistical software was used to calculate the sample size and how was it calculated for this study?

Response: thank you for your comments. The sample size was calculated based on a conducted study by Kodati's study (18) using SPSS software with a 95% confidence interval and 80% test power (lines 71-73).

3. Which inclusion and exclusion standards were used to choose people for the control and anemic groups, and why were these standards thought to be significant?

Response: thank you for your comments. The eligibility criteria subheading has been added to the method section to describe inclusion and exclusion criteria (lines 93-103).

4. Describe the steps involved in gathering and processing saliva samples, such as when to collect them, how to store them, and how they are analyzed in a lab.

Response: thank you for your comments. The study procedure subheading has been added to the method section and the method section has been revised based on your comments (lines 105-113).

5. Which statistical techniques were used to examine the data, and what level of significance was used for this study's statistical significance determination?

Response: thank you for your comments. The statistical analysis subheading has been added to the method and this section has been revised based on your comments (lines 115-120).

Results

1. Which statistical tests were applied to compare the amounts of components in serum and saliva samples between the anemic and healthy groups?

Response: thank you for your comments. All statistical analysis information has been provided in lines 115-120) and in each table.

2. What are the consequences of this result for the study, and were there any statistically significant variations in the ages of the individuals between the two groups?

Response: thank you for your comments. The chi-square test revealed no statistically significant difference in the subjects' ages between the two groups (P-value=0·33) (line 125).

3. What were the key conclusions on serum and salivary levels of iron, ferritin, and TIBC, and how did they vary between the anemic and healthy groups?

Response: thank you for your comments. The result section has been revised based on your comment.

Discussion

1. As stated in the discussion section, what are the primary disadvantages of the current gold standard technique for diagnosing anemia?

Response: thank you for your comments. The disadvantages has been added to the manuscript (lines 150-153).

2. Despite the lack of significance in the comparison, what are the implications of the study's findings regarding the statistical significance of differences in saliva iron and ferritin levels between the anemic and healthy groups?

Response: thank you for your comments. The discussion section has been revised based on your comments (lines 145-206).

3. In the discussion section, how do the authors address the drawbacks of saliva-based diagnostic techniques, including the possibility of false-negative results?

Response: thank you for your comments. Saliva-based diagnostic tools that only measure these markers without considering TIBC may lack sensitivity and lead to false-negative results. So, integrating multiple diagnostic approaches and biomarkers may provide a more comprehensive assessment of iron status and improve the accuracy of anemia diagnosis.

Decision: Major revision

The manuscript is relatively addressed to all the comments completely, and is well qualified now. However, in my opinion, it needs still a minor revision:

- most of all the manuscript requires to check in English writing

Response: with many thanks, the manuscript revised based on your comments.

Below are some comments for each section of the paper:

1. Although the title is clear, it suggested being more informative with a sentence showing the main findings of the study.

Response: Thank you for your suggestion regarding the title. We have revised it to better reflect the main findings and their implications. The new title is 'Comparative Analysis of Serum and Saliva Iron, Ferritin, and TIBC in Women with Iron Deficiency Anemia: Highlighting Saliva's Screening Potential'.

2. The abstract conveys the message of the research paper properly.

Response: Thank you for your feedback.

3. The introduction does not provide a wide understanding about the topic. Specifically, the authors could provide more details about the changes of Iron, Ferritin, and TIBC in Serum and Saliva during anemia.

Response: Thank you for your comments. The details on the analyzed serum and saliva biomarkers have been added to the introduction section (lines 36-49).

4. It needs to justify the sample size selection. Why 20? On which basis? Only based on Kodati’s study?

Response: thank you for your comments. The sample size was calculated using the statistical analysis software, SPSS software with a 95% confidence interval and 80% test power (lines 71-73).

5. The results section is complete and includes a sufficient number of Tables and a Figure. However, the section could be presented clearly.

Response: thank you for your comments. The result section has been revised.

6. The discussion section, the critical comparison to the work done by others could be presented properly. Add limitations of your study.

Response: thank you for your comments. The discussion has been revised and the limitations were added to the manuscript (lines 194-200)

Decision: Minor revision

Sincerely

****

Best regards

Dr. S L

Assistant professor in Oral Medicine Department, Tehran Medical Sciences, Islamic Azad University, Tehran, Iran

3 Revision 2

3 comments · 18 Jun 2024 – 22 Jun 2024

Referee 2 Reviewer

ACCEPT 18 Jun 2024

The article is well organized in general, and its finding can be of interest to the field of Iron Deficiency Anemia.

Associate Editor

ACCEPT 19 Jun 2024

Re: Comparative Analysis of Serum and Saliva Iron, Ferritin, and TIBC in Women with Iron Deficiency Anemia: Highlighting Saliva's Screening Potential [Revision 2]

We're delighted to let you know that your manuscript has been accepted for publication in Middle East Journal of Rehabilitation and Health Studies.

Associate editor comments: Accept

Comments: Congratulations to the authors.

Editor-in-Chief

ACCEPT 22 Jun 2024

Dear Authors
We are pleased to inform you that your article is accepted for publication in the MEJRHS. We hope to receive other qualified articles from your group.