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OPEN PEER REVIEW

Evaluation of Body Composition Assessment Methods in Reproductive-Aged Iranian Women: A Cross-Sectional Study Between Body Mass Index (BMI) and Bioelectrical Impedance Analysis (BIA)

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SUBMITTED	REVISED	ACCEPTED	DOI
30 Sep 2023	21 Aug 2024	23 Sep 2024	10.5812/mejrh-141650

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

3 comments · 12 Nov 2023 – 13 Nov 2023

Referee 1 Reviewer

MAJOR REVISION 12 Nov 2023

This is a descriptive cross-sectional study to clarify the accuracy of BMI in detecting overweight. The topic is interesting, but the method of reporting has some basic problems.
Title:
Please mention the type of study in the title.
Mention “Iranian female”.
Abstract:
This part needs more revision.
Please remove the sentence about overweight in the background and mention the importance of BMI.
Please summarize the objective.
Please provide a little more detail about digital body composition and describe the setting, locations, and relevant dates, including periods of recruitment.
Please use “BMI” in all parts of the manuscript and don’t use other forms of this abbreviation.
Please mention the criteria for overweight according to digital body composition in the method.
Keywords: Please select keywords from the MeSH database that are more relevant than “women health”.
Introduction:
The first paragraph is very long and includes 4-5 sentences. Please revise it into separate sentences.
Method:
Please remove repetitions of “descriptive cross-sectional study” in the manuscript.
Please correct the reference number format in the manuscript. Some references are in ( ), and some are in [ ].
Please report the validity and reliability of “digital body composition”.
What was the method of sample size estimation?

Results:
Please remove any interpretation of the findings in this section and only mention the results.

Discussion:
Please use more up-to-date evidence.
Please mention the confounding factors in your study.

Please remove unnecessary reference numbers in some sentences. “The results of the study conducted by Westerterp et al. showed that exercise 162 training will lead to a healthier body composition by reducing body fat, especially 163 in overweight and obese people, with little or no long-term effect on a person's 164 weight (22) [23]”

Associate Editor

MAJOR REVISION 13 Nov 2023

Dear Author,
Both reviewers completed their reviews of your manuscript and requested major revisions to your submission. Accordingly, you should address their comments/queries point by point in the manuscript and in a separate response-to-reviewers file.

Editor-in-Chief MAJOR REVISION 13 Nov 2023

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.

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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.

The **corresponding author** needs to prepare replies as below:

1. In a Word file, reply to all comments one by one (reply to reviewer)
2. In the Word file of your manuscript, reply and apply all comments as marked or highlighted lines/paragraphs.

No	Reviewer1 comments	reply to reviewer
1	There are a lot of grammar faults in the introduction. Please re-edit all manuscript parts; you should consider a native translator for your manuscript.	We appreciate the time and effort that you and the reviewers have dedicated to providing your valuable feedback on my manuscript. We are grateful to the reviewers for their insightful comments on our paper. We have been able to incorporate changes to reflect most of the suggestions provided by the reviewers. We have highlighted the changes within the manuscript.
2	In the abstract section, you mentioned a reference which is not acceptable. It would be best if you did not mention any reference in the abstract section, and even your referencing method is inconsistent in all parts of your manuscript.	Thank you for pointing this out.we agree with this comment. Therefore, we have have revise the .abstract The reference structure has modified according to the opinion of the reviewers
3	Please review the journal policy in referencing the text.	Thank you for pointing this out The reference structure has modified according to the opinion of the reviewers .
4	In the method section, it's not usual to ask the question, please just insert the scientific data in a scientific manner.	Thank you for pointing this out The reference structure has modified according to the opinion of the reviewers .
5	Please mention sample size calculation	Agree. We have, accordingly, doneThe method of determining the sample size is described. .
6	P valueslrh	Thank you for pointing this out. We agree with this comment. Therefore, we have have revised.
7	the manufacturer’s name and address of the apparatus,	.Thank you for pointing this out. We agree with this comment. Therefore, we have have revised
8	and appropriate statistical analysis	.Thank you for pointing this out. We agree with this comment. Therefore, we have revised .Cohens kappa coefficient used
9	Please mention future suggestions and limitations of your study in the discussion.	Thank you for pointing this out. We agree with this comment. Restrictions and suggestions were .added to the text

No	Reviewer2 comments	reply to reviewer
1	Please mention the type of study in the title	Thank you for pointing this out. We agree with this comment. Therefore, we have revised. The type of study was added in the title .
2	Mention the “Iranian female”	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
3	This is a descriptive cross-sectional study to clarify the accuracy, This part needs more revision	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
4	Please remove sentence about the overweighting in the back ground and mention the importance of BMI	Thank you for pointing this out. We agree with this comment. Therefore, we have .revised
5	Please summarize the objective	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
6	Please mention the little more detail of digital body composition and describe the setting,	more detail of digital body composition have described in text of article.(Body Composition Assessment Tool in method part)
7	- locations, and relevant dates	more detail of digital body composition have described in text of article.(Body Composition Assessment Tool in method part)
8	including periods of recruitment	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
9	Please use “BMI” in all part of manuscript and don’t use the other forms of this abbreviation.	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
12	Please mention the overweight criteria according to the digital body composition in the method.	more detail of digital body composition have described in text of article.(Body Composition
13	please select more related than “women health” key words from Mesh database.	Agree. We have, according to MESH, done
14	The first paragraph is very long and included the 4-5 sentences. Please revise it in separate sentences.	Thank you for pointing this out. We agree with this comment. Therefore, we have revised.
15	Please remove duplications for “descriptive cross-sectional study” in the manuscript	Thank you for pointing this out. We agree with this comment. Therefore, we have .revised
16	Please correct the references number format in the manuscript. Some .[] references in in () some in	Thank you for pointing this out The reference structure has modified according to the opinion of the reviewers
17	”Please report the validity and reliability of “digital body composition	more detail of digital body composition have described in text of article.(Body Composition Assessment Tool in method part)

18	?What was the method of sample size estimation	method of sample size estimation have described in text of article.(Population/Sample Size in method part)
19	Please remove any interpretation about the findings in this section and .only mention the results	Thank you for pointing this out remove interpretation about the findings in result ,section and added to the discussion
20	.Please use more updated evidences	Thank you for pointing this out The reference structure has modified according to .updated evidences
21	.Please mention the confounding factors in your study	Thank you for pointing this out The reference structure has modified according to .the opinion of the reviewers It has been tried to include any variable that confounds the results as an exclusion criterion, for example, pregnancy, having limitations in physical activity or having .an illness
22	Please remove non necessary reference number in some sentences. “The results of the study conducted by Westerterp et al. showed that exercise 162 training will lead to a healthier body composition by reducing body fat, especially 163 in overweight and obese people, ”with little or no long-term effect on a person's 164 weight (22) [23]	Thank you for pointing this out The reference structure has modified according to the opinion of the reviewers .

2 Revision 1

2 comments · 30 Jan 2024 – 30 Jan 2024

Associate Editor

MAJOR REVISION 30 Jan 2024

Dear Author,
In my opinion as an associate editor, this revision has not reached a satisfactory level for publication in the MEJRH. Despite your appreciable effort to improve the manuscript, many more corrections are needed.
Introduction: You stated the importance of BMI calculation and its reasonable relationship with body composition and physical health. However, when I reached the end, I still could not understand the importance of the study. Did the previous studies not address this issue? Or has the logical correlation between the two issues not yet been established? Or is there no agreement, with conflicting information? Only one sentence about women and age has been included at the end. Considering that the study was conducted in a population of women, it is better to clarify the importance of this issue.
Methods: In this section, it is preferable to make adjustments and revisions according to the STROBE standard checklist.
Results: Did you assess the reliability of the assessment method? Why did you use the Kappa coefficient to estimate the correlation between two variables? Do the data have a normal distribution? If yes, please mention this in the results section. If not, please state whether you used a non-parametric method to apply a statistical model.
Discussion: This section still needs more details in the revised manuscript you prepared. References are not present in your draft. Please revise it according to my concerns and resubmit your draft to me for reassessment.

Editor-in-Chief

MAJOR REVISION 30 Jan 2024

Dear Authors
According to the reviewers' and associate editor's comments, your article requires 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.

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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.

In the name of GOD

Dear Esteemed Editor-in-Chief of the Journal,

Greetings.
With respect and gratitude for the careful review and time spent on the detailed assessment of the article, in accordance with the requested revisions in the second round, the manuscript has been revised and rewritten. A summary of the modifications made is as follows:

Response 1: Hello and thank you for the careful feedback from the esteemed reviewers. The existing ambiguities regarding BMI have been addressed, and this research aims to scientifically prove the shortcomings and weaknesses of BMI through a scientific methodology. Regarding the importance of calculating BMI and its logical connection with body composition and physical health, major corrections and changes have been made in the introduction, which is not marked due to the large volume of changes.

Response 2: Yes, the discrepancies have not been accurately reported, and BMI continues to serve as the basis for judgments in the health and disease domain. Therefore, this research seeks to shed light on this issue. The changes or revisions were marked with green color on the third page of the article.

Response 3: Thank you. You are absolutely right. Although the importance of women's health and their role in achieving community health is undeniable, the emphasis on the topic was highlighted based on sources. The corrections in the last part of the introduction of the article were highlighted in green.

Response 4: The work method was arranged based on the STROBE checklist and aligned with the descriptive cross-sectional research method. The proposed corrections in the method section on pages 3 to 5 were carefully made, which are not marked due to the large volume of changes.

Response 5: With respect. Similar to other researchers conducted in Iran and the world, we .only relied on an article that examined the validity and reliability of the tool (source no. 22)

Response 6: Since the study's objective is to examine the agreement between two assessors (body mass index criteria with anthropometric indices), the kappa agreement coefficient was used. The reasons for this choice were outlined in the relevant text. Additionally, since the normality of the data was not a concern for researchers and was not important, there is no need to mention this in the article.

Response 7: Thank you. The discussion, limitations, and other components have been carefully rewritten and reorganized. We hope that the revisions made, in line with the opinions of the editor and esteemed reviewers of the journal, will meet the journal's satisfaction.
Also, please be informed that considering the change in the academic position of the third author of the article, their new affiliation has been included in the manuscript.
Best Regard

3 Revision 2

2 comments · 22 Sep 2024 – 23 Sep 2024

Associate Editor

ACCEPT 22 Sep 2024

It is accepted.

Editor-in-Chief

ACCEPT 23 Sep 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.