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OPEN PEER REVIEW

Better Sense of Force Accuracy in Women with Stress Urinary Incontinence Compared with Women Without Stress Urinary Incontinence: A Surprising Result in a Case-Control Study

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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.

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1 Original submission

5 comments · 24 Aug 2022 – 29 Aug 2022

Referee 1 Reviewer

MINOR REVISION 24 Aug 2022

The manuscript has been well written and contributes to the existing knowledge. Some minor revisions for the authors to consider:
1. In the Method section, please explain how the study size was arrived at.
2. In the Method section, please explain why you chose only absolute error. Why not constant error or variable error? Absolute error is the overall deviation without considering the direction. In constant error, there is a danger of errors canceling out because of direction. Constant error is computed as the average positive or negative difference between the observed and actual values along a dimension of interest. Variable error measures the consistency of the shots. It calculates the standard deviation of the total shots.
3. Why have you not considered SUI subcategories according to severity, age, or other diseases such as lung conditions or pregnancy…? What about urethral hypermobility or intrinsic sphincter deficiency? Age and menopause are likewise factors in stress incontinence.

Referee 2 Reviewer

MINOR REVISION 26 Aug 2022

1. First, you need to explain more about SUI, its prevalence, and its symptoms.
2. In L50, L51: Reference 9 is repeated in 2 consecutive sentences. Please correct this.
3. In L53: Delete the period in the middle of the sentence.
4. Inclusion and exclusion criteria should be listed systematically. For example:
Inclusion criteria included the following: a)…. b)….
5. Explain how you selected the patients.
6. Why was the number of participants in the study 41? Or which article was cited for the calculation?
7. In the article, you mentioned that Table 1 is about demographic information, but Table 1 is about ICC.
8. Table 4 is not available.

Referee 3 Reviewer

MAJOR REVISION 28 Aug 2022

This article investigates the difference in force sense between women with urinary incontinence and healthy women. The article has investigated a good topic. The article is well written. It is necessary to correct the following items.
SUI should be written in full in the title of the article.
In line 59, FS should be written in full at first mention. (force sense, FS)
In the inclusion criteria, given the difference in the level of PF muscle activity between active and inactive people, did you consider the physical activity levels of the participants? Did participants participate in sports activities? Was the urine leakage test administered to all participants in the case group? Were participants given explanations about the use of drugs affecting muscle strength and sedatives, and coffee consumption… before the test? Please describe these items in the article in detail. Did the participants have vaginal or cesarean deliveries? How many births did the participants have? Please mention these items in the demographic findings.
Since pelvic floor proprioception is also affected by anatomical differences in the pelvic floor regions, were these differences investigated in the participants? Was lordosis checked?

Considering the coordination between the function of the pelvic floor muscles and the diaphragm muscle, was attention paid to coordinating the timing of the test with the patient's inhalation or exhalation? Describe the method.
Was the measurement taken by a single investigator? Please mention this.
Did you pay attention to the fullness or emptiness of the participants' bladders when measuring force sense? Was the bladder full or empty at the time of the test? Describe the method.
Why was the lithotomy position not used to perform the tests?
What method was used to check co-contraction of other muscles, such as the gluteal muscles and adductors? Touch? Please explain in detail.
Was the evaluator skilled in the field of evaluation and treatment of pelvic floor disorders? Please explain.
Findings
MDC values should be reported in the ICC table. Maybe the changes are in the MDC range.
Descriptive statistics of MVCs should also be provided.
In table 3, please report other opening and MVC values.

Associate Editor

MAJOR REVISION 28 Aug 2022

Dear author(s)
Thanks for submitting the article to this journal. The article was carefully reviewed by 3 reviewers. According to the reviewers, the article needs major revision. Please make the corrections and resubmit the corrected article.

Editor-in-Chief

MAJOR REVISION 29 Aug 2022

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 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.

Dear Editor, we appreciate you and the reviewers for your precious time in reviewing our paper and providing valuable comments. It was your valuable and insightful comments that led to possible improvements in the current version.

The authors have carefully considered the comments and tried our best to address every one of them. We hope the manuscript after careful revisions meet your high standards. The authors welcome further constructive comments if any. Below we provide the point-by-point responses. All modifications in the manuscript have been track changed and highlighted.

Sincerely,

A.N

Rehabilitation Research Center, Department of Physiotherapy, School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran

Responses to reviewer

Reviewer1:

This article is about investigating the difference in the force sense in women with urinary incontinence and healthy women. The article has investigated a good topic. The article is well written. It is necessary to correct the following items.

SUI should be written in full form, in the title of the article.

Response: *we revised the title as follows:*

"Better sense of force accuracy in women with stress urinary incontinence compared with women without stress urinary incontinence: a surprising result in a case-control study"

In line 59, FS should be written completely for the first time. (Force sense, FS)

Response: It was corrected.

In the inclusion criteria, according to the difference in the level of PF muscle activity in active and inactive people, did you consider the physical activity level of the participant? Did participants do sports activities? Was the urine leakage test taken from all participants in the case group? Was it explained to the participants about the use of drugs affecting muscle strength and sedatives, and coffee consumption... before the test? Please describe the items in the article in detail. Did the samples have a natural delivery or cesarean? How many births did the samples have? Please mention these items in the demographic findings.

Response: inclusion and exclusion criteria were revised (lines 84-87). Also, demographic data about delivery numbers have been added to the table 1. Also in line 173, the rationale behind including both natural and caesarean deliveries was mentioned.

Since pelvic floor proprioception is also affected by anatomical differences in the pelvic floor regions, was this case investigated in the participants? Was lordosis checked?

Considering the coordination between the function of the pelvic floor muscles and the diaphragm muscle, was attention paid to the coordination of the test time with the inhalation or exhalation of the patient? Describe the method. Did the measurement was taken by a single investigator? Please mention.

Response: It is mentioned in lines 140-141.

Did you pay attention to the fullness or emptiness of the people's bladder when measuring the sense of force? Was the bladder full or empty at the time of the test? Describe the method.

Response: details were included in method section line 117.

Why was it not used in the lithotomy position to perform the tests?

Response: *As the lithotomic position results in extreme posterior pelvic tilt rotation, inserting dynamometer in crook lying was more comfortable, also, the patient feels much more comfortable in crook lying compared with lithotomic position.*

What method was used to check co-contraction of other muscles such as gluteal and adductors? Touch? Please explain in detail. Was the evaluator skilled in the field of evaluation and treatment of pelvic floor disorders? Please explain.

Response: This section was written in details in lines 117-141.

Findings MDC values should be reported in the ICC table. Maybe the changes are in the MDC range.

Response: ***dear editor, given that in this case-control study we didn't assess the improvement of SUI and effect of any intervention in women with SUI, our statistical consultant believed that MDC is not required to be included in this article. Here are the amounts of MDC that we calculated upon your request and if you prefer to insert them in the article we will absolutely obey.***

Group	*MVC %*	*Diameter*	*MDC*	*ICC*	*95% CI*
Healthy	*40%*	*5*	*1.84*	*0.913*	*0.827 - 0.968*

		10	2.53	0.835	0.694 - 0.936
	70%	5	2.83	0.794	0.631 - 0.919
		10	3.54	0.677	0.469 - 0.862
Patie	40%	5		0.951	0.912 - 0.977
nt			1.44		
		10	1.56	0.943	0.899 - 0.973
	70%	5	2.59	0.842	0.735 - 0.923
		10	1.53	0.945	0.903 - 0.974

Descriptive statistics of MVCs should also be provided.

Response: *it was included in table 1.*

In table 3, please report other opening and MVC values.

Response: In new version it has been changed to table 6 and all openings and MVCs fulfilled regarding contrast column.

Reviewer2:

1. First, you need to explain more about SUI, about its prevalence and symptoms.

Response*: it was explained in more details in lines 35-44.*

2. In L50, L51: Reference 9 is repeated in 2 consecutive sentences, please correct it.

Response*: it was corrected.*

3. In L53: Delete the point in the middle of the sentence.

Response: it was deleted.

4. Inclusion and exclusion criteria should be mentioned regularly. for example : Inclusion criteria included: a)…. b)….

Response: It was revised (lines 80-88)

5. Explain how you selected the patients?

Response: it was explained in lines 80-89.

6. Why was the number of participants in the study 41 people? Or which article was cited for the calculation?

Response: Articles have been cited

7. In the article, you mentioned that Table 1 is about demographic information, but Table 1 is about ICC.

8. Table 4 is not available.

Response to comment 7 and 8: all tables were added and revised.

Reviewer3:

The manuscript has been well written and contributes to the existing knowledge. Some minor revisions for the authors to consider:

1. In the Method section, please Explain how the study size was arrived at.

***Response**: upon reviewer two request, articles have been cited for sample size calculation.*

2. In the Method section, please Explain why you only choose Absolute error. And why not Constant error or Variable error? Absolute error is the overall deviation without considering the direction. In constant error, there is a danger of cancellations of error because of direction. Constant error is computed as the average positive or negative difference between the observed and actual values along a dimension of interest. Variable error measures the consistency of the shots. It calculates the standard deviation of the total shots.

Response: We chose absolute error, as overestimation and underestimation of target, neutralized each other. Also, we couldn't find a specific direction of error in each group.

3. why you have not considered SUI subcategories according to severity, age, or other diseases such as Lung conditions or pregnancy…? urethral hypermobility,

or intrinsic sphincter deficiency? Age and menopause are likewise factors in stress incontinence.

Response: we included these items in limitation section of the study in lines 296-301.

2 Revision 1

3 comments · 9 Oct 2022 – 19 Oct 2022

Referee 1 Reviewer

ACCEPT 9 Oct 2022

After reviewing the revised manuscript, I feel the authors have sufficiently addressed the issues I raised in the initial review. I applaud the thoroughness of the revision that the authors conducted in response to the reviewers' responses.

Referee 2 Reviewer

ACCEPT 16 Oct 2022

Dear Author
Thank you for the corrections made in the article.

Editor-in-Chief

ACCEPT 19 Oct 2022

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