

OBSTETRICS & GYNECOLOGY



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- Comments from the reviewers and editors (email to author requesting revisions)
- Response from the author (cover letter submitted with revised manuscript)*

**The corresponding author has opted to make this information publicly available.*

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Questions about these materials may be directed to the *Obstetrics & Gynecology* editorial office:
obgyn@greenjournal.org.

Date: Dec 21, 2021
To: "Candace Y Parker-Autry" [REDACTED]
From: "The Green Journal" em@greenjournal.org
Subject: Your Submission ONG-21-2184

RE: Manuscript Number ONG-21-2184

Examining the Role of Non-Surgical Therapy in the Treatment of Geriatric Urinary Incontinence

Dear Dr. Parker-Autry:

Your manuscript has been reviewed by the Editorial Board and by special expert referees. Although it is judged not acceptable for publication in Obstetrics & Gynecology in its present form, we would be willing to give further consideration to a revised version.

If you wish to consider revising your manuscript, you will first need to study carefully the enclosed reports submitted by the referees and editors. Each point raised requires a response, by either revising your manuscript or making a clear and convincing argument as to why no revision is needed. To facilitate our review, we prefer that the cover letter include the comments made by the reviewers and the editor followed by your response. The revised manuscript should indicate the position of all changes made. We suggest that you use the "track changes" feature in your word processing software to do so (rather than strikethrough or underline formatting).

Please be sure to address the Editor comments (see "EDITOR COMMENTS" below) in your point-by-point response.

Your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Jan 11, 2022, we will assume you wish to withdraw the manuscript from further consideration.

REVIEWER COMMENTS:

Reviewer #1:

This was a cohort study of 70 yr old and older community dwelling women who underwent 12 weeks of home prescribed physical therapy to improve urinary incontinence. Authors looked at baseline physical functioning and severity of incontinence in comparing women's response to therapy. Authors conclude that there is not significant improvement in symptoms in these women.

- 1) I thought exclusion criteria mostly made sense except in line 99 - "or if determined otherwise ineligible by the PI". I'm not sure what this refers to but seems like it could lead to some bias in the included/ excluded patients.
- 2) good use of several validated scales/ questionnaires
- 3) Although authors mention that PT should help all types of UI but it would be nice to see the data divided by diagnoses as well. Maybe some diagnoses would respond better to PT
- 4) tables 3 and 4 are hard to follow. Abbreviation of SPPB*time would be helpful. And I think it would be useful to see the physical functioning groups to each other at 6 and 12 weeks (normal vs normal and impaired vs impaired)

As the authors mention, use of certified PT and having women going to sessions would likely work better.

Reviewer #2:

Thank you to the authors for their work on this under-studied but extremely important work on the impact of our frequently prescribed pelvic floor physical therapy (PFPT) in an important subset of our patients who, as stated in the manuscript, are often left out of clinical trials. I have some questions/suggestions but overall I feel that this work is very well done and presented

Abstract:

- 1) Line 29-32: "non-significant decrease" -- this is confusing as women with physical functional impairment did have a

statistically significant (though it is fair to question if it was clinically significant) improvement in UI episodes. Perhaps the authors mean that there was no statistically significant differences in reduced UI episodes per day between the groups?

2) Lines 36-38: The primary outcome was to compare physical function impact on the results of PF muscle training. Consider including information about this comparison in the conclusions, even simply adding on "even when taking into account levels of physical impairment" or something similar at the end of the final conclusions statement.

Manuscript:

- 1) Excellent introduction summarizing why this is important work.
- 2) Line 105: "Charlson Comorbidity Index"
- 3) Line 121: "Bristol" is not capitalized
- 4) Line 123: pelvic floor physical therapist does not need capitalization
- 5) Line 133+: On the first read through this manuscript, I missed that this was not supervised PFPT but rather at home, prescribed regimen. Perhaps make this more obvious here or in the introduction?
- 6) Line 166: Student's t-test, not a capitalized T
- 7) Line 182: "Charlson Comorbidity Index" is all capitalized.
- 8) Lines 204-208: Similar to the above comment in the manuscript, this sentence is unclear is unclear as the physical function impairment group seems to have a statistically significant reduction in UI episodes (though this may not meet clinically important differences, which is fair). Again -- do the authors mean that there is NO difference in mean change between groups?
- 9) Line 210: H2O, not H2O (Zero)
- 10) Lines 214-216: This sentence is also unclear -- consider "... compared to women with impaired physical function based on UDI-6...." The information about the short physical performance battery score defining the groups was established much earlier in the methods section.
- 11) Line 225: Consider a caveat to this sentence, that the changes were not statistically significant (crossing zero)
- 12) Line 224: H2O, not H2O (zero)
- 13) Line 238: Recommend deleting "the efficacy of"
- 14) Line 299: "previously"
- 15) Line 303-305: "The majority of women..." -- is this in the authors practice? Is this from a citation? This does not reflect everyone's practice pattern.
- 16) Line 307: "sacrifice of appointment time" -- do the authors mean the time that patients spend on their appointments?

Figure:

- 1) The baseline #s/N are missing from Figure 1 (top most double-box line in the figure, N=33 and N=37 should be there)

Tables:

- 1) For all tables, ensure that all acronyms are defined in each table which includes "SPPB". As the groups were defined well in the manuscript, consider removing this acronym from all tables as this is an unfamiliar term to most readers, most likely
- 2) Table 1 -- Bristol is not all capitalized
- 3) Table 1 -- SPPB abbreviation in title (see #1 in this section)
- 4) Per journal guidelines, include IQR and SD in abbreviations.
- 5) Table 2: Uncapitalize "floor" in title and see note #1 in this section re: SPPB
- 6) Table 2: Ensure all acronyms/abbreviations are defined
- 7) Table 3 and 4: The final column "SPPB*Time" are confusing -- please clarify this
- 8) Table 3: The "Diff" columns at 6 and 12 weeks are unclear -- please remove or clarify. Removing will allow improved readability of this table given formatting issues of the long width)
- 9) Table 3: Does this table include a longitudinal mixed model or does only Table 4?
- 10) Table 4: Consider removing the bold formatting from the references as this calls the eye to these less important cells.
- 11) Table 4: The carat next to P-value is unclear in its purpose

Reviewer #3:

The authors present a prospective study on pelvic floor physical therapy (PFP) in elderly patients. Overall this is a good study and answers an important question. Globally however it is far too verbose and will need editing if published.

Lines 48-50 please provide at least a basic description of PFP for the reader. It is important to set the stage for this work.
Line 62- remove logical as this is awkward and is not appropriate for a medical journal

Line 77- how many patients did you send the invite to?

Line 89-103- This is too verbose I would move much of this to supplemental data

Globally the methods section is far too long and verbose- This should be tightened up to include only relevant points and the rest moved to supplemental materials

Line 168- how did you come up with this power calculation. This is not well written and should include how you chose your alpha and beta and what the exact metric being measured is

Line 176- you were only able to recruit about 50% after your mailing- why was this and how does this affect your results? Results section is also far too long- please revise and present the data in a more concise manner focusing on pertinent positives

STATISTICAL EDITOR COMMENTS:

Abstract: Need to concisely include the criteria for classifying as physical function impairment vs not.

lines 32-34: The difference is nominal, but does not differ from random chance, based on $p = .08$. Therefore cannot conclude that the improvement was lower.

lines 167-169: The sample size/power analysis was based on the # of urinary incontinence episodes/day, comparing the two groups. Therefore that outcome should be clearly separated from the others in Tables and Results. The other comparisons were not powered and any NS findings may also be underpowered and not generalizable from these data.

Table 1: Each cohort has $N < 100$, so the %s should all be rounded to nearest integer %, not cited to 0.1% precision.

Table 2, Table 3: The entries for total UI episodes were 4.5 ± 2.9 and 2.7 ± 2.1 in Table 2, but 4.3 ± 0.6 and 2.7 ± 0.6 in Table 3. What is the difference in SD and in mean values? Also, it appears from lines 32-34 that the difference of interest was in comparing the two cohorts, not in serial assessment of the difference. That would require a stricter threshold for inference testing, since multiple hypotheses were being tested. Should format the # UI episodes for the two cohorts as mean \pm SD at baseline, then at 6 wks, then 12 wks, in addition to showing the changes at 6 and 12 weeks.

EDITORIAL OFFICE COMMENTS:

1. The Editors of Obstetrics & Gynecology have increased transparency around its peer-review process, in line with efforts to do so in international biomedical peer review publishing. If your article is accepted, we will be posting this revision letter as supplemental digital content to the published article online. Additionally, unless you choose to opt out, we will also be including your point-by-point response to the revision letter. If you opt out of including your response, only the revision letter will be posted. Please reply to this letter with one of two responses:

- A. OPT-IN: Yes, please publish my point-by-point response letter.
- B. OPT-OUT: No, please do not publish my point-by-point response letter.

2. When you submit your revised manuscript, please make the following edits to ensure your submission contains the required information that was previously omitted for the initial double-blind peer review:

- * Include your title page information in the main manuscript file. The title page should appear as the first page of the document. Add any previously omitted Acknowledgements (ie, meeting presentations, preprint DOIs, assistance from non-byline authors).
- * Funding information (ie, grant numbers or industry support statements) should be disclosed on the title page and in the body text. For industry-sponsored studies, the Role of the Funding Source section should be included in the body text of the manuscript.
- * Include clinical trial registration numbers, PROSPERO registration numbers, or URLs at the end of the abstract (if applicable).
- * Name the IRB or Ethics Committee institution in the Methods section (if applicable).
- * Add any information about the specific location of the study (ie, city, state, or country), if necessary for context.

3. Obstetrics & Gynecology uses an "electronic Copyright Transfer Agreement" (eCTA), which must be completed by all authors. When you uploaded your manuscript, each co-author received an email with the subject, "Please verify your authorship for a submission to Obstetrics & Gynecology." Please check with your coauthors to confirm that they received and completed this form, and that the disclosures listed in their eCTA are included on the manuscript's title page.

4. For studies that report on the topic of race or include it as a variable, authors must provide an explanation in the manuscript of who classified individuals' race, ethnicity, or both, the classifications used, and whether the options were defined by the investigator or the participant. In addition, the reasons that race/ethnicity were assessed in the study also should be described (eg, in the Methods section and/or in table footnotes). Race/ethnicity must have been collected in a formal or validated way. If it was not, it should be omitted. Authors must enumerate all missing data regarding race and ethnicity as in some cases, missing data may comprise a high enough proportion that it compromises statistical precision and bias of analyses by race.

Use "Black" and "White" (capitalized) when used to refer to racial categories. The nonspecific category of "Other" is a convenience grouping/label that should be avoided, unless it was a prespecified formal category in a database or research instrument. If you use "Other" in your study, please add detail to the manuscript to describe which patients were included in that category.

5. If your study uses ICD-10 data, please make sure you do the following:
- State which ICD-10-CM/PCS codes or algorithms were used as Supplemental Digital Content.
 - Use both the diagnosis and procedure codes.
 - Verify the selected codes apply for all years of the study.
 - Conduct sensitivity analyses using definitions based on alternative codes.
 - For studies incorporating both ICD-9 and ICD-10-CM/PCS codes, the Discussion section should acknowledge there may be disruptions in observed rates related to the coding transition and that coding errors could contribute to limitations of the study. The limitations section should include the implications of using data not created or collected to answer a specific research question, including possible unmeasured confounding, misclassification bias, missing data, and changing participant eligibility over time.
 - The journal does not require that the title include the name of the database, geographic region or dates, or use of database linkage, but this data should be included in the abstract.
 - Include RECORD items 6.3 and 7.1, which relate to transparency about which codes, validation method, and linkage were used to identify participants and variables collected.

6. Standard obstetric and gynecology data definitions have been developed through the reVITALize initiative, which was convened by the American College of Obstetricians and Gynecologists and the members of the Women's Health Registry Alliance. Obstetrics & Gynecology has adopted the use of the reVITALize definitions. Please access the obstetric data definitions at <https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-obstetrics-data-definitions> and the gynecology data definitions at <https://www.acog.org/practice-management/health-it-and-clinical-informatics/revitalize-gynecology-data-definitions>. If use of the reVITALize definitions is problematic, please discuss this in your point-by-point response to this letter.

7. Because of space limitations, it is important that your revised manuscript adhere to the following length restrictions by manuscript type: Original Research reports should not exceed 5,500 words. Stated word limits include the title page, précis, abstract, text, tables, boxes, and figure legends, but exclude references.

8. Specific rules govern the use of acknowledgments in the journal. Please note the following guidelines:

- * All financial support of the study must be acknowledged.
- * Any and all manuscript preparation assistance, including but not limited to topic development, data collection, analysis, writing, or editorial assistance, must be disclosed in the acknowledgments. Such acknowledgments must identify the entities that provided and paid for this assistance, whether directly or indirectly.
- * All persons who contributed to the work reported in the manuscript, but not sufficiently to be authors, must be acknowledged. Written permission must be obtained from all individuals named in the acknowledgments, as readers may infer their endorsement of the data and conclusions. Please note that your response in the journal's electronic author form verifies that permission has been obtained from all named persons.
- * If all or part of the paper was presented at the Annual Clinical and Scientific Meeting of the American College of Obstetricians and Gynecologists or at any other organizational meeting, that presentation should be noted (include the exact dates and location of the meeting).
- * If your manuscript was uploaded to a preprint server prior to submitting your manuscript to Obstetrics & Gynecology, add the following statement to your title page: "Before submission to Obstetrics & Gynecology, this article was posted to a preprint server at: [URL]."

9. The most common deficiency in revised manuscripts involves the abstract. Be sure there are no inconsistencies between the Abstract and the manuscript, and that the Abstract has a clear conclusion statement based on the results found in the paper. Make sure that the abstract does not contain information that does not appear in the body text. If you submit a revision, please check the abstract carefully.

In addition, the abstract length should follow journal guidelines. The word limit for Original Research articles is 300 words. Please provide a word count.

10. Only standard abbreviations and acronyms are allowed. A selected list is available online at <http://edmgr.ovid.com/ong/accounts/abbreviations.pdf>. Abbreviations and acronyms cannot be used in the title or précis. Abbreviations and acronyms must be spelled out the first time they are used in the abstract and again in the body of the manuscript.

11. The journal does not use the virgule symbol (/) in sentences with words. Please rephrase your text to avoid using "and/or," or similar constructions throughout the text. You may retain this symbol if you are using it to express data or a measurement.

12. ACOG avoids using "provider." Please replace "provider" throughout your paper with either a specific term that defines the group to which are referring (for example, "physicians," "nurses," etc.), or use "health care professional" if a specific term is not applicable.

13. In your Abstract, manuscript Results sections, and tables, the preferred citation should be in terms of an effect size, such as odds ratio or relative risk or the mean difference of a variable between two groups, expressed with appropriate confidence intervals. When such syntax is used, the P value has only secondary importance and often can be omitted or noted as footnotes in a Table format. Putting the results in the form of an effect size makes the result of the statistical test more clinically relevant and gives better context than citing P values alone.

If appropriate, please include number needed to treat for benefits (NNTb) or harm (NNTh). When comparing two procedures, please express the outcome of the comparison in U.S. dollar amounts.

Please standardize the presentation of your data throughout the manuscript submission. For P values, do not exceed three decimal places (for example, "P = .001"). For percentages, do not exceed one decimal place (for example, 11.1%).

14. Please review the journal's Table Checklist to make sure that your tables conform to journal style. The Table Checklist is available online here: http://edmgr.ovid.com/ong/accounts/table_checklist.pdf.

15. Please review examples of our current reference style at <http://ong.editorialmanager.com> (click on the Home button in the Menu bar and then "Reference Formatting Instructions" document under "Files and Resources"). Include the digital object identifier (DOI) with any journal article references and an accessed date with website references. Unpublished data, in-press items, personal communications, letters to the editor, theses, package inserts, submissions, meeting presentations, and abstracts may be included in the text but not in the reference list.

In addition, the American College of Obstetricians and Gynecologists' (ACOG) documents are frequently updated. These documents may be withdrawn and replaced with newer, revised versions. If you cite ACOG documents in your manuscript, be sure the references you are citing are still current and available. Check the Clinical Guidance page at <https://www.acog.org/clinical> (click on "Clinical Guidance" at the top). If the reference is still available on the site and isn't listed as "Withdrawn," it's still a current document.

If the reference you are citing has been updated and replaced by a newer version, please ensure that the new version supports whatever statement you are making in your manuscript and then update your reference list accordingly (exceptions could include manuscripts that address items of historical interest). If the reference you are citing has been withdrawn with no clear replacement, please contact the editorial office for assistance (obgyn@greenjournal.org). In most cases, if an ACOG document has been withdrawn, it should not be referenced in your manuscript.

16. Figure 1: Please add exclusion boxes and upload as a figure file on Editorial Manager.

When you submit your revision, art saved in a digital format should accompany it. If your figure was created in Microsoft Word, Microsoft Excel, or Microsoft PowerPoint formats, please submit your original source file. Image files should not be copied and pasted into Microsoft Word or Microsoft PowerPoint.

When you submit your revision, art saved in a digital format should accompany it. Please upload each figure as a separate file to Editorial Manager (do not embed the figure in your manuscript file).

If the figures were created using a statistical program (eg, STATA, SPSS, SAS), please submit PDF or EPS files generated directly from the statistical program.

Figures should be saved as high-resolution TIFF files. The minimum requirements for resolution are 300 dpi for color or black and white photographs, and 600 dpi for images containing a photograph with text labeling or thin lines.

Art that is low resolution, digitized, adapted from slides, or downloaded from the Internet may not reproduce.

17. Authors whose manuscripts have been accepted for publication have the option to pay an article processing charge and publish open access. With this choice, articles are made freely available online immediately upon publication. An information sheet is available at <http://links.lww.com/LWW-ES/A48>. The cost for publishing an article as open access can be found at <https://wkauthorservices.editage.com/open-access/hybrid.html>.

If your article is accepted, you will receive an email from the editorial office asking you to choose a publication route (traditional or open access). Please keep an eye out for that future email and be sure to respond to it promptly.

If you choose open access, you will receive an Open Access Publication Charge letter from the Journal's Publisher, Wolters Kluwer, and instructions on how to submit any open access charges. The email will be from publicationservices@copyright.com with the subject line, "Please Submit Your Open Access Article Publication Charge(s)." Please complete payment of the Open Access charges within 48 hours of receipt.

If you choose to revise your manuscript, please submit your revision through Editorial Manager at

<http://ong.editorialmanager.com>. Your manuscript should be uploaded as a Microsoft Word document. Your revision's cover letter should include the following:

- * A confirmation that you have read the Instructions for Authors (<http://edmgr.ovid.com/ong/accounts/authors.pdf>), and
- * A point-by-point response to each of the received comments in this letter. Do not omit your responses to the Editorial Office or Editors' comments.

If you submit a revision, we will assume that it has been developed in consultation with your co-authors and that each author has given approval to the final form of the revision.

Again, your paper will be maintained in active status for 21 days from the date of this letter. If we have not heard from you by Jan 11, 2022, we will assume you wish to withdraw the manuscript from further consideration.

Sincerely,

John O. Schorge, MD
Deputy Editor, Gynecology

2020 IMPACT FACTOR: 7.661
2020 IMPACT FACTOR RANKING: 3rd out of 83 ob/gyn journals

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com/ong/login.asp?a=r>). Please contact the publication office if you have any questions.

January 25, 2022

To the Editorial Team of the Obstetrics and Gynecology Journal:

Thank you for the opportunity to revise our original research article titled “Examining the Role of Non-Surgical Therapy in the Treatment of Geriatric Urinary Incontinence” (Manuscript Number ONG-21-2184) for consideration of publication by your journal. We would like to thank the reviewers and the statistical editor for the time they invested in reviewing our paper. Starting on page 2 of this letter you will find the point-by-point responses to all of the reviewers’ comments/questions in bold and red.

As the lead author, I affirm that the responses and updates to the manuscript are an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained. I hereby re-submit this self-blinded manuscript for consideration in *Obstetrics & Gynecology*.

Respectfully,



Candace Parker-Autry, MD
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J. Koudy Williams DVM
Weixin Zhao, MD

REVIEWER COMMENTS:

Reviewer #1:

This was a cohort study of 70 yr old and older community dwelling women who underwent 12 weeks of home prescribed physical therapy to improve urinary incontinence. Authors looked at baseline physical functioning and severity of incontinence in comparing women's response to therapy. Authors conclude that there is not significant improvement in symptoms in these women.

- 1) I thought exclusion criteria mostly made sense except in line 99 - "or if determined otherwise ineligible by the PI". I'm not sure what this refers to but seems like it could lead to some bias in the included/ excluded patients.

Thank you for pointing out this important exclusion criterion. I originally included this in the IRB protocol to allow for exclusion of patients who were not cooperative or reliable in transportation as advised by my mentorship team. I have examined our participant flow and there were not any potential participants who were excluded based on being ineligible per my opinion. Therefore, this verbiage has been deleted from the paper.

- 2) good use of several validated scales/ questionnaires

Thank you.

- 3) Although authors mention that PT should help all types of UI but it would be nice to see the data divided by diagnoses as well. Maybe some diagnoses would respond better to PT

Thank you for bringing up the very important point that pelvic floor physical therapy is an integral component of the initial management for stress urinary incontinence, urgency urinary incontinence, and mixed urinary incontinence. As reflected by the most recent abridged Cochrane review co-authored by Chantale Dumoulin[1], pelvic floor muscle improved urinary incontinence symptoms regardless of the type and thus is vital to the first-line treatment of urinary incontinence. Our goal was to pragmatically examine pelvic floor muscle training in a cohort of older women with and without physical function impairments. While it is plausible that there may be a subtype of urinary incontinence that the therapy may have worked better for within our cohort, our primary goal was to examine its role as the primary intervention for urinary incontinence of any type among women with and without physical function impairments. Examining sub-types in this small cohort may be misleading, as we were not specifically targeting any one particularly. We did analyze the QUID total and sub-scale scores for stress- and urgency- urinary incontinence subtypes and examined differences based on physical function status and did not find any significant differences (Table 2). We did not however examine post-intervention differences based on urinary incontinence types as this data has been previously published [1]. However, examining differences based on physical performance and urinary incontinence sub-type would be of great interest in a much larger prospective study that is specifically powered for this assessment.

- 4) tables 3 and 4 are hard to follow. Abbreviation of SPPB*time would be helpful.

I apologize that tables 3 and 4 are hard to follow. In an effort to improve the clarity of tables 3 and 4 we have changed the title from "Examining the impact of poor physical performance (defined as SPPB>9) on reduction of UI episodes after 6 and 12 weeks of pelvic floor physical therapy from longitudinal mixed models adjusting for age, BMI, and race in addition to correlation between repeated measures" to "Examining the impact of impaired physical performance on reduction of urinary incontinence episodes after 6 and 12 weeks of pelvic floor physical therapy from mixed effect models adjusting for age, BMI, and race". We have also added greater clarity to the definitions of the columns. As suggested by the statistical editor, we have added least squares mean data from the mixed effect model.

And I think it would be useful to see the physical functioning groups to each other at 6 and 12 weeks (normal vs normal and impaired vs impaired)

Thank you for this suggestion. We have taken note of the need to improve the clarity and message table 3. We however desire to keep the table in its current format.

Regarding your specific suggestion, the Normal_{baseline} vs Normal_{6-week} and Normal_{baseline} vs Normal_{12-week} are shown as mean differences with confidence limits. If the confidence limits do not include zero in the change column, then the change is not statistically significant. In light of your comment as well as suggestions by other reviewers, we have refocused table 3 to highlight the primary outcome data and removed columns in hope to create a more clear table. We have added a footnote

to add clarity to the model. Regarding table 4, there are no within functional group comparisons to baseline given that these measures were collected at follow-up only.

5) As the authors mention, use of certified PT and having women going to sessions would likely work better.

Thank you for highlighting an important deficiency in the methodology description to specify the pelvic floor therapy protocol, supervision of therapy, and the 2 week follow-up visit that were all supervised by a pelvic floor physical therapist and a Urogynecologist with specific training in pelvic floor physical therapy. This important detail has been added to the paper (lines 181--388). In light of this, it is important to note that access to a certified pelvic floor physical therapist is not feasible by the majority of older women with urinary incontinence in the US. Further, the efficacy of pelvic floor muscle training performed at home and independent of a certified pelvic floor physical therapist is well established [1, 2]. The 6th International Consultation on Incontinence regarding Incontinence in frail elderly recently highlighted that “the majority of studies of behavioral interventions have been conducted with frail older adults in long-term care settings. Few interventions have been tested in hospitalized or home bound older adults”[3] thus, the pragmatic design of the study on older, community-dwelling women addresses an important deficiency in our knowledge of the efficacy of pelvic floor muscle training as the first-line treatment for urinary incontinence in older women.

Reviewer #2:

Thank you to the authors for their work on this under-studied but extremely important work on the impact of our frequently prescribed pelvic floor physical therapy (PFPT) in an important subset of our patients who, as stated in the manuscript, are often left out of clinical trials. I have some questions/suggestions but overall I feel that this work is very well done and presented

Abstract:

1) Line 29-32: "non-significant decrease" -- this is confusing as women with physical functional impairment did have a statistically significant (though it is fair to question if it was clinically significant) improvement in UI episodes. Perhaps the authors mean that there was no statistically significant differences in reduced UI episodes per day between the groups?

This verbiage has been corrected to state “After 6 weeks of pelvic floor exercises, women with physical functional impairment had a greater decrease in incontinence episodes/day compared to women with normal physical function (mean [95%CI], -1.2 [-2.0,-0.5] vs -0.4 [-1.1, 0.3]),, but this difference was not statistically significant, p=0.31.” In lines 30-40 of the updated paper.

2) Lines 36-38: The primary outcome was to compare physical function impact on the results of PF muscle training. Consider including information about this comparison in the conclusions, even simply adding on "even when taking into account levels of physical impairment" or something similar at the end of the final conclusions statement.

Thank you for this suggestion. I have amended the sentence to read “Behavioral therapy including pelvic floor muscle training may not significantly decrease urinary incontinence symptoms to a degree that is satisfactory in women older than 70 years seeking treatment for urinary incontinence, regardless of the presence of physical function impairments.” Lines 44-46

Manuscript:

1) Excellent introduction summarizing why this is important work.

Thank you for your thoughts. The authors appreciate your support of the introduction.

2) Line 105: "Charlson Comorbidity Index"

This has been corrected in line 167.

3) Line 121: "Bristol" is not capitalized

This has been corrected in line 180

4) Line 123: pelvic floor physical therapist does not need capitalization

This has been corrected in line 181

- 5) Line 133+: On the first read through this manuscript, I missed that this was not supervised PFPT but rather at home, prescribed regimen. Perhaps make this more obvious here or in the introduction?

We have added more descriptive details of the pelvic floor therapy session that was supervised for 2 sessions with the majority of therapy being done at home. Please refer to lines 181-388 in the amended version of the paper.

- 6) Line 166: Student's t-test, not a capitalized T

This has been corrected in line 430

- 7) Line 182: "Charlson Comorbidity Index" is all capitalized.

This has been corrected in line 450

- 8) Lines 204-208: Similar to the above comment in the manuscript, this sentence is unclear is unclear as the physical function impairment group seems to have a statistically significant reduction in UI episodes (though this may not meet clinically important differences, which is fair). Again -- do the authors mean that there is NO difference in mean change between groups?

This has been corrected to read "After 6 weeks of pelvic floor muscle training and behavioral therapy, women with physical function impairments experienced a greater decrease in urinary incontinence episodes (mean [95%CI]: -1.2[-2.0,-0.5] UI episodes/day) compared to women without physical function impairments (-0.4[-1.1, 0.3]); this difference did not reach statistical significance, p=0.31." in lines 496-499.

- 9) Line 210: H2O, not H20 (Zero)

This has been corrected in line 507

- 10) Lines 214-216: This sentence is also unclear -- consider "... compared to women with impaired physical function based on UDI-6..." The information about the short physical performance battery score defining the groups was established much earlier in the methods section.

This result is already presented in table 3 and this sentence was removed to shorten the results section per the advice of the reviewer.

- 11) Line 225: Consider a caveat to this sentence, that the changes were not statistically significant (crossing zero)

This has been re-phrased in lines 505-513

- 12) Line 224: H2O, not H20 (zero)

This has been corrected as stated above.

- 13) Line 238: Recommend deleting "the efficacy of"

This has been deleted from line 594.

- 14) Line 299: "previously"

This has been deleted.

- 15) Line 303-305: "The majority of women..." -- is this in the authors practice? Is this from a citation? This does not reflect everyone's practice pattern.

In a retrospective chart review of an academic Urogynecology practice, referral rates for supervised pelvic floor muscle training was performed in 35% of women. Of those, 67% attended and only 42% completed. [4]

- 16) Line 307: "sacrifice of appointment time" -- do the authors mean the time that patients spend on their appointments?

This has been rephrased "Access to a pelvic floor physical therapist is limited by a cost, access to qualified providers, and need to travel to appointments multiple times per week." In lines 459-461.

Figure:

- 1) The baseline #s/N are missing from Figure 1 (top most double-box line in the figure, N=33 and N=37 should be there)

This has been updated in figure 1.

Tables:

- 1) For all tables, ensure that all acronyms are defined in each table which includes "SPPB". As the groups were defined well in the manuscript, consider removing this acronym from all tables as this is an unfamiliar term to most readers, most likely

This has been updated in the revised table 3

- 2) Table 1 -- Bristol is not all capitalized

This has been updated in the revised table 1

- 3) Table 1 -- SPPB abbreviation in title (see #1 in this section)

This has been updated in the revised table 1

- 4) Per journal guidelines, include IQR and SD in abbreviations.

This has been corrected in the revised table 1

- 5) Table 2: Uncapitalize "floor" in title and see note #1 in this section re: SPPB

The title for table 2 has been changed "*Table 2. Examining associations between pelvic floor and skeletal muscle outcomes based on baseline physical function status*"

- 6) Table 2: Ensure all acronyms/abbreviations are defined

Table 2 has been revised with correction of names/titles that should not have been capitalized or abbreviated. Also acronyms were defined when pertinent.

- 7) Table 3 and 4: The final column "SPPB*Time" are confusing -- please clarify this

We now have removed this column and re-organized tables 3 and 4 per multiple reviewers' requests.

- 8) Table 3: The "Diff" columns at 6 and 12 weeks are unclear -- please remove or clarify. Removing will allow improved readability of this table given formatting issues of the long width)

We agree. We now have removed this column to make the table clearer.

- 9) Table 3: Does this table include a longitudinal mixed model or does only Table 4?

Both tables refer to longitudinal mixed models for continuous variables. We now have made it clear in the titles of the table.

- 10) Table 4: Consider removing the bold formatting from the references as this calls the eye to these less important cells.

All bold formatting for the data has been removed and this table has been updated to read more clearly.

- 11) Table 4: The carat next to P-value is unclear in its purpose

We have re-organized table 4 to clarify.

Reviewer #3:

The authors present a prospective study on pelvic floor physical therapy (PFP) in elderly patients. Overall this is a good study and answers an important question. Globally however it is far too verbose and will need editing if published.

Lines 48-50 please provide at least a basic description of PFP for the reader. It is important to set the stage for this work.

This was updated in lines 61-71

Line 62- remove logical as this is awkward and is not appropriate for a medical journal

This has been removed

Line 77- how many patients did you send the invite to?

We targeted women with a diagnosis of urinary incontinence within our health system within the previous 6 months. This diagnosis could have been historic or a new diagnosis. We sent our 1,473 letters over the entire recruitment period and asked women to call only if they were interested in urinary incontinence treatment. Of those women targeted, 253 called to

express their interest in urinary incontinence treatment and underwent telephone screen.

Line 89-103- This is too verbose I would move much of this to supplemental data Globally the methods section is far too long and verbose- This should be tightened up to include only relevant points and the rest moved to supplemental materials Line 168- how did you come up with this power calculation. This is not well written and should include how you chose your alpha and beta and what the exact metric being measured is.

The methods section has been significantly shortened to only include relevant points and additions per other reviewers. We have added more clarity to the power calculation in lines 438-440.

Line 176- you were only able to recruit about 50% after your mailing- why was this and how does this affect your results?

Potential participants were identified by ICD-9/10 diagnoses codes only. The letters were mailed to these women to elicit the severity of urinary incontinence and their bother with urinary incontinence symptoms. Women who were contacted with an introductory letter were only asked to contact us if they were interested in having treatment for their urinary incontinence symptoms. Therefore, those who did not contact us may have not been interested in having any treatment of their urinary incontinence symptoms. Of the 253 women who did contact us, 173 were screened ineligible and all of the remaining 80 presented for in person evaluation and screening.

Results section is also far too long- please revise and present the data in a more concise manner focusing on pertinent positives **I have shortened the results from 769 (original) to 701 (revised paper).**

STATISTICAL EDITOR COMMENTS:

Abstract: Need to concisely include the criteria for classifying as physical function impairment vs not.

A description has been added to the abstract "Baseline physical function was determined using the Short Physical Performance Battery; total score $\leq 9/12$ defined impaired physical function, scores >9 defined normal physical function)."

lines 32-34: The difference is nominal, but does not differ from random chance, based on $p = .08$. Therefore, cannot conclude that the improvement was lower.

We have re-worded this to make it clear.

lines 167-169: The sample size/power analysis was based on the # of urinary incontinence episodes/day, comparing the two groups. Therefore, that outcome should be clearly separated from the others in Tables and Results. The other comparisons were not powered and any NS findings may also be underpowered and not generalizable from these data.

We have separated primary and secondary outcomes as presented in table 3.

Table 1: Each cohort has $N < 100$, so the %s should all be rounded to nearest integer %, not cited to 0.1% precision.

This has been corrected in the revised Table 1

Table 2, Table 3: The entries for total UI episodes were 4.5 ± 2.9 and 2.7 ± 2.1 in Table 2, but 4.3 ± 0.6 and 2.7 ± 0.6 in Table 3. What is the difference in SD and in mean values?

The differences in values or total UI episodes are due to raw values being presented in Table 2 and fitted means and standard errors being presented in Table 3. We have changed the label for the columns in Table 3 to clarify that these are adjusted means.

Also, it appears from lines 32-34 that the difference of interest was in comparing the two cohorts, not in serial assessment of the difference. That would require a stricter threshold for inference testing, since multiple hypotheses were being tested.

We only have two groups of women, so the group comparison doesn't involve multiple comparisons. We are aware of that we have more than one outcomes. However, since this analysis is of hypothesis generating instead of hypothesis confirmation, we did not adjust for multiple comparisons in general.

Should format the # UI episodes for the two cohorts as mean \pm SD at baseline, then at 6 wks, then 12 wks, in addition to showing the changes at 6 and 12 weeks.

We now have added least square means at each visit in table 3.

1. Cacciari, L.P., C. Dumoulin, and E.J. Hay-Smith, *Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women: a cochrane systematic review abridged republication*. Braz J Phys Ther, 2019. **23**(2): p. 93-107.
2. Vaz, C.T., et al., *Effectiveness of pelvic floor muscle training and bladder training for women with urinary incontinence in primary care: a pragmatic controlled trial*. Brazilian journal of physical therapy, 2019. **23**(2): p. 116-124.
3. Gibson, W., et al., *Incontinence in frail elderly persons: Report of the 6th International Consultation on Incontinence*. Neurourol Urodyn, 2021. **40**(1): p. 38-54.

4. Brown, H.W., et al., *Better together: multidisciplinary approach improves adherence to pelvic floor physical therapy*. International urogynecology journal, 2020. **31**(5): p. 887-893.