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LETTER

# Comparing the Therapeutic Impact of Strain-Counterstrain and Exercise on Low Back Myofascial Pain Syndrome: A Randomized Trial [Letter]

Swarup Ghosh 10\*, Krishnagopal Mondal\*

Maharishi Markandeshwar Institution of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to Be University), Ambala, Haryana, India

\*These authors contributed equally to this work

Correspondence: Swarup Ghosh, Maharishi Markandeshwar Institution of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, 133207, India, Email swarupghosh199648@gmail.com

### Dear editor

We were intrigued by the article by Ghada et al, titled "Comparing the Therapeutic Impact of Strain-Counterstrain and Exercise on Low Back Myofascial Pain Syndrome: A Randomized Trial", published in your esteemed journal.<sup>1</sup> The study presented innovative and clinically significant findings, and we commend the authors for their novel approach in addressing the myofascial component of low back pain. The study concluded that combining the strain-counterstrain technique with exercise therapy effectively alleviates pain, improves lumbar range of motion, and reduces disability. However, certain aspects of the study warrant further clarification.

Firstly, based on the authors' hypothesis, the title could have been more appropriately named "Combined Effect of Strain-Counterstrain and Exercise Therapy" rather than "Comparing", as exercise therapy was provided in both groups. Additionally, the title does not align with the PICO framework, as it fails to clearly highlight the outcome measures.<sup>2</sup>

Secondly, the keywords mentioned in the abstract, such as "strain-counter-strain" and "myofascial trigger points", do not align with the Medical Subject Headings (MeSH) terminology.<sup>3</sup>

Thirdly, the authors stated in the abstract that participants aged 45-55 years were recruited; however, in the article, the participants section describes them as being aged 20–40 years, creating confusion and inconsistency.

Fourthly, the authors mentioned recruiting participants with mechanical neck pain, while the title focuses on a myofascial pain syndrome population. Although both conditions may share postural causes, they are distinct: mechanical neck pain involves vertebral segment pain with movement dysfunction, with or without myofascial trigger points, whereas myofascial pain syndrome is primarily characterized by the presence of trigger points.<sup>4</sup>

Additionally, the inclusion criteria for the recruited participants did not specify baseline scores for VAS or limitations in lumbar range of motion, unlike mentioned for the Oswestry Low Back Disability Questionnaire (ODI). Including these measures could have better represented the subacute to chronic nature of the condition discussed in the study and may have influenced the clinical findings.<sup>5</sup>

Fifthly, the estimated sample size in the study does not match the actual sample size calculation performed using G\*Power software,<sup>6</sup> based on the given effect size, statistical power, and alpha value, as presented in Figure 1.

Lastly, in the exercise therapy section, the authors mentioned providing both stretching and strengthening exercises for the back muscles without specifying any particular muscle group. A more detailed description of the targeted muscle groups would have provided greater clarity regarding the exercises performed.

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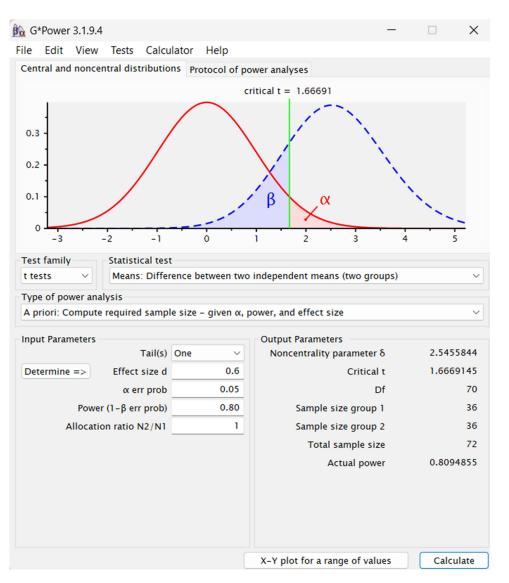


Figure I Sample Size Estimation using G\*Power Software.

Abbreviations: PICO, Population Intervention Comparison Outcome; VAS, Visual Analogue Scale.

We encourage the authors to consider these points and trust that addressing these remarks and concerns will improve the clarity and integrity of the published results.

## Disclosure

The authors report no conflicts of interest in this communication.

## References

- 1. Koura GM, Elshiwi AM, Selim M, et al. Comparing the Therapeutic Impact of Strain-Counterstrain and Exercise on Low Back Myofascial Pain Syndrome: a Randomized Trial. *J Multidiscip Healthc*. 2025;18:1–12. doi:10.2147/JMDH.S499927
- 2. Roever L. PICO: model for Clinical Questions Evidence Based Medicine and Practice E v id ence B a s e d Me dic in e. 2018; Accessed Jan 23, 2025. Available from: http://pubmedhh.nlm.nih.gov/nlmd/pico/piconew.php.
- 3. Sullivan D. MeSH on Demand. Routledge: Technical Services Quarterly; 2015;32:448-449. http://www.nlm.nih.gov/mesh/MeSHonDemand.html.
- 4. De Las Peñas CF, Fernández Carnero J, Miangolarra Page JC. Musculoskeletal disorders in mechanical neck pain: myofascial trigger points versus cervical joint dysfunction A clinical study. *J Musculoskelet Pain*. 2005;13(1):27–35. doi:10.1300/J094v13n01\_04
- 5. White IR, Thompson SG. Adjusting for partially missing baseline measurements in randomized trials. *Stat Med.* 2005;24(7):993–1007. doi:10.1002/ sim.1981
- 6. Kang H. Sample size determination and power analysis using the G\*Power software. *J Educ Evaluat Health Professions*. 2021;18:17. doi:10.3352/ jeehp.2021.18.17

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471