

Traditional Chinese Rehabilitation Exercise (TCRE) for Myofascial Pain—A Superficial Synthesis with Missed Opportunities [Letter]

Zhidong Zhou, Qiang Liu

The Third Affiliated Hospital of Zhejiang Chinese Medical University, Hangzhou, Zhejiang, 310005, People's Republic of China

Correspondence: Qiang Liu, The Third Affiliated Hospital of Zhejiang Chinese Medical University, No. 219 Moganshan Road, Hangzhou, Zhejiang, People's Republic of China, Email cookie@dewang.cc

Dear editor

We write to critique the recent article “Traditional Chinese Rehabilitation Exercise (TCRE) for Myofascial Pain: Current Evidence and Further Challenges” by Liu et al.¹ While the authors commendably synthesize existing evidence on Baduanjin, Wuqinxi, and Yijinjing, the perspective suffers from critical oversights that undermine its scientific rigor and translational value. Below, we outline four major shortcomings.

The authors highlight positive outcomes of TCRE in myofascial pain but inadequately address the methodological flaws of cited studies. For instance, the referenced RCTs often suffer from small sample sizes, short follow-up periods, and inconsistent outcome measures, mirroring broader issues in TCRE research. The review uncritically cites meta-analyses without acknowledging heterogeneity among studies, such as variations in intervention protocols and control group designs. The latest systematic review² in 2025 emphasize substantial high heterogeneity and methodological biases across studies examining TCRE, raising significant concerns about the generalizability and reliability of findings. While the meta-analysis demonstrates statistically significant improvements in pain scores among patients practicing Baduanjin, these findings must be interpreted with caution due to substantial methodological heterogeneity across included studies.

The article hypothesizes that TCRE alleviates pain through “fascial remodeling” and “neuromodulation”, yet it fails to engage with mechanistic studies validating these claims. In 2024, a study investigating the effects of Baduanjin on axial myofascial biomechanical properties in patients with ankylosing spondylitis (AS) has demonstrated significant improvements.³ Specifically, Baduanjin practice enhances myofascial biomechanical function, alleviates mechanical stress, mitigates microdamage and inflammatory responses at tendon-bone attachment points, and modulates downstream cellular signaling pathways – potentially inhibiting pathological osteogenesis. In contrast, Liu’s theoretical framework notably omits recommendations for comparable pharmacological or biomechanical analyses of TCRE. This absence of mechanistic investigation leaves TCRE’s purported therapeutic mechanisms at the level of anecdotal observation, thereby impeding its systematic incorporation into evidence-based rehabilitation protocols.

The perspective promotes TCRE as a “low-cost, non-invasive” therapy but overlooks critical barriers to standardization. Baduanjin and Wuqinxi protocols vary widely across studies in movement execution, breathing techniques, and instructor expertise, raising concerns about reproducibility. Additionally, while the authors mention TCRE’s “favorable safety profile”, they omit discussions on adverse events, such as joint strain in elderly populations or improper technique exacerbating pain—a notable gap given the inclusion of older adults in trials.

The proposed future research—focusing on aging and robotics—reads as a superficial checklist rather than a transformative vision. While the authors note the potential of exoskeletons, they fail to articulate how TCRE’s principles (eg, “mind-body coordination”) could inform robot-assisted rehabilitation algorithms. Contrastingly, recent protocols for knee osteoarthritis TCM trials emphasize blinded designs and objective biomarkers, which this perspective neglects to prioritize. Furthermore, the discussion on long-COVID syndrome is speculative, lacking references to

registered trials or mechanistic hypotheses connecting TCRE to post-viral myofascial recovery. More evidence⁴ should be added to enrich these contents.⁵ While Liu et al provide a timely overview of TCRE, the perspective's uncritical synthesis and missed opportunities for depth render it more a catalog of studies than a critical guide for future research.

Funding

This work was supported by Education Department reform project of Zhejiang province, Zhejiang Chinese Medicine University Postgraduate Scientific Research Fund Project (project number: Y202351281). The funder had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Disclosure

The authors declare no conflicts of interest in this communication.

References

1. Liu X, Pan F, Wang Q, Wang S, Zhang J. Traditional Chinese Rehabilitation Exercise (TCRE) for myofascial pain: current evidence and further challenges. *J Pain Res.* 2024;17:2801–2810. PMID: 39220224; PMCID: PMC11366241. doi:10.2147/JPR.S482424
2. Tian Y, Liu ZY, Wang JH, Qian JH. The efficacy and safety of Baduanjin exercise as complementary therapy for pain reduction and functional improvement in knee osteoarthritis: a meta-analysis of randomized controlled trials. *Complement Ther Med.* 2025;88:103127. PMID: 39828222. doi:10.1016/j.ctim.2025.103127
3. Xie Y, Zhang Q, Xin D, Wang Y. Effects of a 12-week Baduanjin regimen on biomechanical properties of axial muscle fascia in ankylosing spondylitis. *Medicine.* 2024;103(52):e40522. PMID: 39969360; PMCID: PMC11688099. doi:10.1097/MD.00000000000040522
4. Antonelli M, Donelli D. Evaluating qigong as integrative support for COVID-19 and Long-COVID-19 rehabilitation: a systematic review. *Front Psychol.* 2024;15:1403130. PMID: 38807958; PMCID: PMC11130475. doi:10.3389/fpsyg.2024.1403130
5. Liu S, Zhu R, Yao C, et al. Long-term follow-up of the treatment for severe COVID-19 with qigong exercise and acupuncture: a randomized controlled trial. *Integr Med Res.* 2024;13(4):101084. PMID: 39399822; PMCID: PMC11465148. doi:10.1016/j.imr.2024.101084

Dove Medical Press encourages responsible, free and frank academic debate. The content of the Journal of Pain Research 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the Journal of Pain Research editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

Journal of Pain Research

Publish your work in this journal

The Journal of Pain Research is an international, peer reviewed, open access, online journal that welcomes laboratory and clinical findings in the fields of pain research and the prevention and management of pain. Original research, reviews, symposium reports, hypothesis formation and commentaries are all considered for publication. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-pain-research-journal>

Dovepress
Taylor & Francis Group