



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

indicated that both instruments should be equally recommended to quantify risk of bias in the meta-analysis, but they cannot be used interchangeably. We do, however, recognize the utility of the Cochrane risk of bias.

With respect to the definition of mild cognitive impairment (MCI), we have clearly indicated that<sup>3</sup> “To meet our MCI definition, participants who were at the age of 50 or above must be clearly defined as MCI according to validated diagnostic tools, such as the Montreal Cognitive Assessment (MoCA), the Petersen’s Criteria for Amnesic-Mild Cognitive Impairment, the Clinical Dementia Rating, and/or the Mini-Mental State Examination (MMSE).” Thus, MCI was defined by the authors of the primary studies. This aim of this meta-analysis was to comprehensively evaluate the beneficial effects of mind-body exercises for individuals with MCI, but did not focus on the causes of MCI.

We excluded studies that investigated the effects of mind-body exercises on health outcomes of individuals with MCI if they did not include a control group. It is well accepted that without a control group, causal inferences cannot be rendered. Finally, we agree that language is a medium of conscious cognitive processing, but our meta-analysis is limited to the outcomes that were measured in the individual studies. This parameter was infrequently reported.

Liye Zou, PhD

*Exercise and Mental Health Laboratory; Institute of Mental Health  
School of Psychology  
Shenzhen University  
Shenzhen, China*

Paul D. Loprinzi, PhD

*Exercise & Memory Laboratory  
Department of Health  
Exercise Science and Recreation Management  
University of Mississippi  
Oxford, MS*

Albert S. Yeung, MD

*Depression Clinical and Research Program  
Massachusetts General Hospital  
Harvard University  
Boston, MA*

Nan Zeng, PhD

*Prevention Research Center  
Department of Pediatrics  
School of Medicine  
University of New Mexico  
Albuquerque, NM*

Tao Huang, PhD

*Department of Physical Education  
Shanghai Jiaotong University  
Shanghai, China*

## References

1. Zou L, Loprinzi P, Yeung A, Zeng N, Huang T. The beneficial effects of mind-body exercises for people with mild cognitive impairment: a systematic review with meta-analysis. *Arch Phys Med Rehabil* 2019; 100:1556-73.
2. Moseley AM, Rahman P, Wells GA, et al. Agreement between the Cochrane risk of bias tool and Physiotherapy Evidence Database (PEDro) scale: a meta-epidemiological study of randomized controlled trials of physical therapy interventions. *PLoS One* 2019;14:e0222770.
3. Duara R, Loewenstein DA, Greig MT, et al. Pre-MCI and MCI: neuropsychological, clinical, and imaging features and progression rates. *Am J Geriatr Psychiatry* 2011;19:951-60.

<https://doi.org/10.1016/j.apmr.2020.08.002>

## Letter to the Editor on “Chronic Pain Self-Management Support With Pain Science Education and Exercise (COMMENCE) for People With Chronic Pain and Multiple Comorbidities: A Randomized Controlled Trial”



We were very interested to read about Miller et al’s unique self-management support (SMS) program for patients with chronic noncancer pain, described in their article “Chronic Pain Self-Management Support With Pain Science Education and Exercise (COMMENCE) for People With Chronic Pain and Multiple Comorbidities: A Randomized Controlled Trial.”<sup>1</sup> As the authors point out, chronic pain is a leading contributor to disability, health care utilization, and reduced workplace productivity. Many individuals with chronic pain suffer from multiple comorbidities and have significant barriers to accessing health care. Yet, this population is underrepresented in pain research, whether directly owing to exclusion criteria in many studies or indirectly owing to selection bias in recruitment methods. This article is unique in that it draws its subjects from a community health center serving a marginalized population, including people with low income, lack of health insurance, addiction or mental health concerns, and isolated seniors. The SMS intervention developed by the authors is also unique in its inclusion of tailored exercise regimens for each individual, as well as cognitive behavioral strategies targeting cognitive risk factors for chronic pain.

The COMMENCE intervention described in Miller et al’s article consisted of 2 visits per week over 6 weeks. One weekly group meeting focused on education about self-management, pain science, and cognitive behavioral principles. Another weekly individual meeting between the patient and a physical therapist helped support implementation of self-management plans and develop an individually tailored exercise program. With a patient population that has multiple comorbidities and barriers to health care, it is impressive that more than half of the participants in the intervention group attended at least 75% of the sessions. We were impressed by their improvements in outcomes measuring function, pain intensity, catastrophic thinking, and self-efficacy, among others.

Keeping in mind that some of the barriers to health care may be related to transportation and the logistics of traveling for in-person visits, we wonder whether such an intervention could be delivered remotely with a similar level of efficacy, especially with the increase in telemedicine applications in response to the coronavirus disease pandemic. In a systematic review of digital support interventions for the self-management of low back pain, Nicholl et al<sup>2</sup> found heterogeneous studies in the literature but noted that most of the interventions did not include a physical activity component and several did not have tailoring elements, both areas in which COMMENCE excels. Although we recognize

that remote delivery may present technological barriers, it might also allow the intervention to reach a population that could not feasibly participate in the in-person program. In addition, the convenience of remote delivery could facilitate longer term participation and maintenance of the resulting benefits.

We applaud Miller et al for their research focused on filling a need for patients with chronic pain, multimorbidity, and barriers to health care access. We look forward to further work on the important topic of SMS in chronic pain management and hope that telemedicine applications will have a role for expanding the audience for SMS interventions.

Erika T. Yih, MD

*Department of Physical Medicine and Rehabilitation  
Harvard Medical School and Spaulding Rehabilitation Hospital  
Boston, MA*

Julie K. Silver, MD

*Department of Physical Medicine and Rehabilitation  
Harvard Medical School  
Massachusetts General Hospital  
Brigham and Women's Hospital  
and Spaulding Rehabilitation Hospital  
Boston, MA*

## References

1. Miller J, MacDermid JC, Walton DM, Richardson J. Chronic Pain Self-Management Support With Pain Science Education and Exercise (COMMENCE) for people with chronic pain and multiple comorbidities: a randomized controlled trial. *Arch Phys Med Rehabil* 2020;101:750-61.
2. Nicholl BI, Sandal LF, Stochkendahl MJ, et al. Digital support interventions for the self-management of low back pain: a systematic review. *J Med Internet Res* 2017;19:e179.

<https://doi.org/10.1016/j.apmr.2020.06.032>

## Virtual Self-Management Has Potential Benefits and Challenges: A Response to a Letter to the Editor



We thank Drs Silver and Yih for their interest in our trial, “Chronic Pain Self-Management Support With Pain Science Education and Exercise (COMMENCE) for People With Chronic Pain and Multiple Comorbidities: A Randomized Controlled Trial,”<sup>1</sup> and for their shared recognition of the importance of identifying effective self-management supports for people living with pain who experience multimorbidity and barriers to accessing health care.

We fully agree with the authors’ suggestion that digital self-management supports provide an important opportunity to overcome geographic and transportation barriers to participation that are common for people living with pain.<sup>2,3</sup> Incorporating the unique elements of COMMENCE, such as tailored of exercises and cognitive-behavioral approaches, in a digital self-management support may pose additional challenges in comparison with more standardized self-management supports. However, we agree that this is a worthy pursuit and suggest that research on the feasibility, barriers, and facilitators of incorporating these elements within online self-management programs is an important next step. We have begun to

incorporate some of these elements in digital self-management supports ([www.iamable.ca](http://www.iamable.ca)) and look forward to contributing to a growing body of literature evaluating digital self-management supports by evaluating a digital self-management support that incorporates some of the unique aspects of COMMENCE in the near future. We hope other readers may join this call to action.

We would also like to share a potential challenge with offering digital self-management supports. The context created by the coronavirus disease 2019 pandemic has led to a rapid shift to delivering care virtually, including attempts to deliver COMMENCE online. We are hearing from our clinical community about some of the successes and challenges associated with this shift. Certainly, we have heard examples of how virtual interventions have helped overcome transportation barriers and reduced the risk of transmission of coronavirus disease 2019. However, we are also hearing concerns that offering digital self-management, rather than in-person self-management, may be further contributing to inequities in care for people who lack the technical skills to access digital platforms, people who have lower health literacy, and people without adequate financial resources to afford a computer or smart phone. As we continue along the path toward effective digital chronic pain self-management supports to increase the reach of these interventions, we need to identify strategies to address the multiple barriers that contribute to inequitable access, so we do not end up exacerbating other inequities in access to care while we address geographic and transportation barriers.

Thank you again to Drs Silver and Yih for the thoughtful letter and to the editor for the opportunity to contribute to this important conversation.

Jordan Miller, PhD  
*School of Rehabilitation Therapy  
Queen's University  
Kingston, Ontario, Canada.*

Joy C. MacDermid, PhD  
*School of Physical Therapy  
Western University  
London, Ontario, Canada  
Royal Society of Canada  
Ottawa, Ontario, Canada.*

David M. Walton, PhD  
*School of Physical Therapy  
Western University  
London, Ontario, Canada.*

Julie Richardson, PhD  
*School of Rehabilitation Science  
McMaster University  
Hamilton, Ontario, Canada.*

## References

1. Miller J, MacDermid JC, Walton DM, Richardson J. Chronic pain self-management support with pain science education and exercise (COMMENCE) for people with chronic pain and multiple comorbidities: a randomized controlled trial. *Arch Phys Med Rehabil* 2020; 101:750-61.
2. Blair MJ, Matthias MS, Nyland KA, et al. Barriers and facilitators to chronic pain self-management: a qualitative study of primary care patients with comorbid musculoskeletal pain and depression. *Pain Med* 2009;10:1280-90.