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Advancing the science of mind-body interventions: A comment on Larkey et al

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The past decade has seen burgeoning interest among researchers, clinicians, and the public in the potential benefits of mind-body interventions such as yoga, tai chi, qigong, and mindfulness-based stress reduction for patients with cancer and other medical conditions. An informal literature search reveals hundreds of studies conducted in the past 5–10 years, most of which suggest that mind-body interventions lead to improvements in physical and/or psychological functioning (see, for example,^{1–7}). The study by Larkey and colleagues⁸ adds to this literature by comparing the effects of a simplified version of Tai Chi called Qigong/Tai Chi Easy (QG/TCE) to a “placebo” control condition, Sham Qigong.

The use of the Sham Qigong control condition is a noteworthy feature of this study, as most previous studies have used standard care control groups. Selecting an appropriate control condition for studies testing mind-body interventions is complex given their multi-component nature. Lackey et al.⁸ chose to control for the exercise component, a valid option given recent evidence regarding the benefits of conventional exercise interventions that do not include meditation.^{9–11} The authors also paid careful attention to the potential for bias by blinding participants to their treatment condition and assessing participants’ perceptions of the credibility of their assigned treatment condition. The finding that QG/TCE was superior to the sham intervention in reducing fatigue represents one of the first demonstrations that interventions utilizing meditation and breathing exercises may have unique benefits for cancer survivors. Interestingly, both the sham intervention and QG/TCE led to improvements in sleep quality and depression, suggesting that components common to both interventions, including gentle exercise and social support, may be beneficial. However, because the study did not have a usual care control group, it is also possible that these effects were due to time.

Overall, this study is methodologically rigorous, particularly in its approach to the control condition, and as such provides an excellent model for future research of mind-body interventions. Given relatively consistent evidence that these interventions are safe and beneficial, research should now focus on developing a better understanding of how they work and for whom, and on methods for increasing access and enhancing effects. For example, the fact that mind-body interventions are typically conducted in groups has

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important implications that are rarely addressed explicitly. Many patients may find it impossible or impractical to attend group sessions; in the current study 40 women were excluded because they could not attend the group at the scheduled time. This raises the question of whether interventions could be conducted individually or remotely (e.g., self-guided with DVDs or via videoconference) and whether they would have the same effects.

Additional recommendations for future research to advance the science include: (a) including greater numbers of non-white and underserved participants so as to increase the generalizability of findings; (b) designing studies to evaluate mechanisms of treatment effects; (c) examining questions related to intervention dose including the optimal number of sessions; (d) including longer term follow-ups and strategies such as booster sessions or the inclusion of a partner to help sustain practice and thus maintain treatment effects, and (e) evaluating the effects on health care use and associated costs. By addressing these questions, research may point the way to more effective and accessible mind-body interventions that can be integrated into clinical care.

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