## LETTER TO EDITOR

# Mindfulness-Based Cognitive Therapy in the Treatment of Late-Life Anxiety and Depression —a Pilot Study



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DOI:http://dx.doi.org/10.5770/cgj.19.215

### Letter to the Editor:

Geriatric depression and anxiety are very common but difficult to treat pharmacologically; patients are more sensitive to adverse effects and respond relatively less well to medication. <sup>(1)</sup> Mindfulness-based cognitive therapy (MBCT) is a psychological therapy that has been highly effective in the treatment of psychiatric disorders, particularly in preventing relapse of depression.<sup>(2)</sup> However, there has only been one previous exploratory study examining its effectiveness in treating older adults.<sup>(3)</sup> We hypothesized that MBCT group psychotherapy will improve acute anxiety and depression in late life.

We examined a retrospective case series of six geriatric outpatients (aged  $\geq$  60) with major depression and/or anxiety disorders who underwent an eight-week group MBCT course (2 hours per week) delivered by a psychiatrist (SR) in Fall 2014. Patients with normal cognition or mild cognitive impairment were included, while patients with dementia, acute psychosis, or acute suicidal ideation were excluded. Psychotropic medications were not adjusted during the treatment period. Ethics approval was obtained at Sunnybrook Health Sciences Centre in Toronto, Canada. We compared patients' self-report scores on the Beck Anxiety Inventory (BAI), Beck Depression Inventory 2 (BDI-2), and Montreal Cognitive Assessment (MoCA) pre- and post-MBCT.

Our patients were aged 66 to 82 (mean 74.5  $\pm$  6.2), 66.7% were females, with an average of 4.8 ( $\pm$  3.4) medical comorbidities and 6.3 ( $\pm$  2.9) medications, including 1.0 ( $\pm$  0.9) psychiatric medications. At baseline, patients (n = 6) had a mean BAI score of 24.5 ( $\pm$  15.6), a BDI of 17.8 ( $\pm$  12.8), and a MoCA of 27.0 ( $\pm$  1.4). All patients completed the MBCT course and all self-reported enjoying the groups, with three patients attending all sessions and three patients missing only one session.

Following MBCT, in patients with baseline anxiety (BAI > 7) (n = 5), the BAI score was significantly decreased by a mean of 37.7% ( $\pm$  13.7) (range 26.1% to 57.1%) reduced from 28.0 ( $\pm$  14.5) to 18.6 ( $\pm$  11.8) (t = 6.7, p = .003). Considering patients with baseline depression (BDI > 7) (n = 4), the BDI score decreased by 33.3% ( $\pm$  38.2) (range from 8.7% to 77.8%), reduced from 26 ( $\pm$  2.1) to 17 ( $\pm$  9.1), although likely due to our limited sample size, this result was non-significant (t = 1.78, p = .17). Patients' cognition (n = 6) did not change meaningfully (mean +0.2 points increase in MoCA  $\pm$  1.8). At the end of the MBCT course, patients reported practicing formal mindfulness on their own an average of 3.6 times per week for 13.3 minutes/day.

We observed strong effect sizes in both anxiety and depression for MBCT (Cohen's d of 0.71 and 1.4, respectively), comparable to first-line antidepressants and individual cognitive behavioral therapy after generally longer treatment periods (e.g., a Cohen's d of 0.4–1.3 after 15 weeks, with important placebo effects).<sup>(4,5)</sup>

Our findings suggest that group MBCT could be an effective, well-tolerated, and health resource-efficient alternative and adjunct to current treatments in older adults. This appeared to be the case in our small sample of patients with an average symptom severity in the moderate-to-severe range. Future randomized controlled trials should further assess the effectiveness of MBCT in late-life anxiety and depression.

#### ACKNOWLEDGEMENTS

Dr. Rej was supported by the Canadian Institutes of Health Research (CIHR) Fellowship Award. We wish to thank Ms. Melissa Armstrong, Ms. Tasoula Masina, Ms. Kathy Ostaff and the Sunnybrook Dept. of Psychiatry for their great support of the geriatric MBCT group therapy.

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## **CONFLICT OF INTEREST DISCLOSURES**

Dr. Herrmann has received research funding from Lundbeck, Roche, Pfizer, Transition Therapeutics, and honoraria from AbbVie and Eli Lilly. Dr. Selchen has received honoraria from the Sunnybrook Mindfulness-Based Group Practice therapist training workshop. The remaining authors have no conflicts to declare.

## REFERENCES

- 1. Lenze EJ, Sheffin M, Driscoll HC, *et al.* Incomplete response in late-life depression: getting to remission. *Dialog Clin Neurosci.* 2008;10:419–30.
- Chiesa A, Serretti A. Mindfulness based cognitive therapy for psychiatric disorders: a systematic review and meta-analysis. *Psychiat Res.* 2011;187(3):441–53.

- Foulk MA, Ingersoll-Dayton B, Kavanagh J, et al. Mindfulness-based cognitive therapy with older adults: an exploratory study. J Gerontol Soc Work. 2014;57(5):498–520.
- 4. Locher C, Kossowsky J, Gaab J, *et al.* Moderation of antidepressant and placebo outcomes by baseline severity in late-life depression: a systematic review and meta-analysis. *J Affect Disorders.* 2015;181:50–60.
- Schuurmans J, Comijs H, Emmelkamp PMG, et al. A randomized, controlled trial of the effectiveness of cognitive-behavioral therapy and sertraline versus a waitlist control group for anxiety disorders in older adults. *Am J Geriatr Psychiat*. 2006;14(3):255–63.

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