

The Effects of a Mindfulness Movement Therapy Programme on Anxiety and Depression in Patients with Stroke

Weeranan Yaemrattanakul^{1*}, Phanprapa Rungrit², Helge Gillmeister³, Joanna Jackson⁴

¹Dr. Department of Physical Therapy, Prince of Songkla University, Thailand

²Physiotherapist, Department of Rehabilitation Medicine, Prince of Songkla University, Thailand

³Dr. Department of Psychology, University of Essex, United Kingdom

⁴Professor, School of Sport, Rehabilitation and Exercise Sciences, University of Essex, United Kingdom

*Corresponding Author

Background

Stroke is a major public health problem worldwide. Anxiety and depression are common complications post-stroke. In the last decade, it has been discovered that mindfulness could have potential benefits on anxiety and depression in stroke patients. Therefore, this study proposes a new protocol of a Mindfulness Movement Therapy Programme (MMTP) aimed at improving anxiety and depression in patients with stroke.

Purpose

To examine the efficacy of a MMTP on anxiety and depression in patients with stroke.

Methods

Seven patients with stroke were recruited. They received the usual rehabilitation programme for 4 weeks (control period). After that, they underwent the usual rehabilitation programme combined with the MMTP, which consisted of 1) body scan meditation, 2) sitting meditation, and 3) mindful movement integrated with physical therapy techniques, for 30 minutes, 3 times a week, for 8 weeks (experimental period). The outcome measures employed were the Hospital Anxiety and Depression Scale (HADS), the Philadelphia Mindfulness Scale (PHLMS), and the Stroke Impact Scale (SIS) 3.0.

Results

Significant improvements were detected in the scores of PHLMS ($p=0.027$), perceived recovery domain of SIS ($p=0.045$), as well as the total SIS score ($p=0.043$). However, we found a large effect size for a decrease in the depression domain scores of HADS (Cohen's $d=1.02$).

Conclusions

Our findings suggest that the MMTP has the potential to complement the usual rehabilitation programme's ability to improve the patient's quality of life and mindfulness level. Moreover, a trend of decreasing depression scores in association with this therapy protocol was observed.

Keywords: depression, exercise, physical activity, Parkinson's disease.

