

**INBRIEF** Summarizing the Evidence

## Mindfulness Training for Chronic Non-malignant Pain Management: A Review

### **Key Messages**

- · There was insufficient evidence identified to draw conclusions on the clinical effectiveness of mindfulness training versus no treatment. Evidence from one limited quality systematic review suggests that mindfulness training versus wait list control significantly improved a patient's pain acceptance and depression scores. The same review did not show statistically significant improvements in pain intensity, anxiety, and quality of life outcomes.
- Overall, the evidence was mixed for mindfulness training (with or without pharmacotherapy) compared with pharmacotherapy alone for chronic non-malignant pain management. Mindfulness training (with or without pharmacotherapy) either improved or did not significantly change outcomes for patients with chronic pain compared with pharmacotherapy alone. Mindfulness training does not appear to significantly worsen pain outcomes.
- · No relevant evidence regarding the cost-effectiveness of mindfulness training for chronic non-malignant pain in adults was identified.
- Three evidence-based guidelines provide recommendations supporting the use of mindfulness training for chronic non-malignant pain in adults. These recommendations are based on a varying quality of evidence.
- More research is needed to assess the comparative clinical effectiveness and cost-effectiveness of mindfulness training to both no treatment and pharmacologic interventions.

#### Context

Chronic pain involves persistent or recurrent pain lasting longer than three months. It is estimated to impact 21% of the general Canadian population. Chronic pain adversely affects both the

patient and society, and is associated with substantial economic implications. A variety of treatment options have been explored to help manage pain, including drug therapies (both prescription and non-prescription), physical therapy, exercise, surgery, psychological therapy, and complementary and alternative therapies. When deciding on a treatment option for a patient with chronic pain, careful consideration should be given to the benefits and risks of the treatment. Medications, such as opioids, are commonly prescribed for pain; however, they come with many serious risks, such as addiction and overdose.

### **Technology**

Mindfulness training is a treatment option for people who suffer from chronic pain. Mindfulness is defined as the intentional and non-judgmental conscious awareness of the present moment.

#### Issue

A previous CADTH report published in 2012 examined the clinical effectiveness and evidence-based guidelines for the use of mindfulness training for chronic pain in adults. The report was unable to draw conclusions because of insufficient evidence. An update is needed to determine if the evidence is more conclusive for the clinical and cost-effectiveness of mindfulness training for chronic pain, and if evidence-based guidelines recommend its use. The results may help inform objective decision-making in practice.

#### **Methods**

A limited literature search was conducted of key resources. Titles and abstracts were reviewed, and potentially relevant articles were retrieved and assessed for inclusion. The final selection of full-text articles was based on predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

#### Results

The findings from 10 publications — three systematic reviews, three randomized controlled trials from four publications, and three evidence-based guidelines — were summarized from two Rapid Response Reports.



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