Teixeira et al. (2008) reviewed peer-reviewed studies in which meditation was the primary intervention with populations experiencing chronic pain, established by medical history. All programmes in the studies reviewed included a didactic/educational component, relaxation and a small group format. The majority of studies reviewed based their intervention on the Mindfulness Based Stress Reduction (MBSR) programme developed by Kabat-Zinn (1982). Teixeira et al. identified ten studies meeting these inclusion criteria: Six studies were randomised controlled trials or quasi-experimental studies and four had no control group.

Teixeira et al. propose that the studies they reviewed are suggestive of health benefits and indicate a potential for mindfulness meditation to result in improvements in both physical and psychological outcome measures. They do however acknowledge limitations of the studies they reviewed and suggest that large RCTs are needed to validate the efficacy of meditation based programmes and that qualitative studies would elucidate the experiences of people living with chronic pain, thus facilitating the use of relevant outcome measures.
Kabat-Zinn et al (1985) assessed mindfulness-based techniques in 90 chronic pain patients. Measures of pain, anxiety and depression were reduced immediately following the 10-week course and most improvements were maintained up to 15 months post-meditation training. Morone et al. (2008) in a trial of Mindfulness for the management of chronic low back pain (CLBP) in adults aged 65 and older demonstrated improved pain acceptance and physical functioning compared to the wait-list control group.

Breathworks is currently involved in a project in conjunction with the Human Pain Research Group, within the Clinical Neurosciences Group at The University of Manchester, investigating the therapeutic mechanisms of mindfulness-based pain management in patients with chronic musculoskeletal pain. Patients undergo a series of tests before and after the programme, such as sustained attention tasks, EEG scans and questionnaires. The data from this study is due to be analysed in the second half of 2009 with a view to publication in 2010.

McCracken and colleagues research mindfulness in the context of a programme who’s primary treatment principles are based in part on Acceptance and Commitment Therapy (ACT) developed by Hayes and colleagues (1999). Baer (2003) notes that although ACT does not describe its treatment as mindfulness, its strategies are consistent with mindfulness approaches in that clients are taught to recognize an observing self who is capable of watching their own bodily sensations, thoughts and emotions (p128). Evidence from ACT is thus relevant for the evidence base for mindfulness-based interventions: McCracken et al. (2007) measured mindfulness, pain, emotional distress, disability and medication use in 105 chronic pain patients. Their results indicate that patients may suffer less and function better when they are “more
realistically in contact with their experiences, and are aware of these experiences in a way that minimizes some of their otherwise automatic reactions.” (p 68).

McCracken et al. (2005) studying 108 patients with complex chronic pain trained in mindfulness found that pain and functioning improved and were maintained at 3-month follow-up. Reductions in depression, physical and psychosocial disability and an increased ability to perform simple physical exercise were demonstrated, as were reductions in analgesic use and GP visits, and improved work status at follow-up.

The evidence base for mindfulness-based interventions as part of the repertoire of treatments for managing chronic pain does still require more research. However, as Grossman et al. (2004) in a meta-analysis of mindfulness based interventions for a range of clinical and non-clinical problems comment: “the literature seems to clearly slant toward support for basic hypotheses concerning the effects of mindfulness on mental and physical well-being. Mindfulness training may be an intervention with potential for helping many to learn to deal with chronic disease and stress.” (p 40)


