

## Mindfulness Moderates Pain Severity and Pain-related Disability among Chronic Pain Patients

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Today's, non-pharmacological treatments such as Cognitive Behavioral Therapy (CBT) has provided more attention because these procedures have no side effects. Existing evidences revealed that Mindfulness-Based Stress Reduction (MBSR), and Mindfulness-Based Cognitive Therapy (MBCT) are CBT subtypes which could impact on depression, anxiety, and Quality of Life (QOL) [1].

Mindfulness which has been defined as focusing on the present moment without judgment, has been verified as being effective for pain management. It has been discussed that Mindfulness-Based Interventions (MBIs) could reduce anxiety, depression, and burnout among health care providers, and it has been indicated that these cognitive procedures could improve many disorders and stress as well [2].

Many trials regarding Cognitive Therapy (CT), MBSR, and Behavior Therapy (BT) suggest that all these treatments produce reductions in pain as well as improvements in physical function, mood, and sleep disturbance in people suffer from chronic pain conditions [3].

It has been argued that Cognitive therapy, MBSR, and BT have shown beneficial effects at same rates for people with Chronic

Low Back Pain (CLBP). However, there are challenges that if these techniques are as effective as psychosocial treatments for chronic pain [4-5]. Although, evidences showed that CT, Mindfulness Meditation (MM), and MBCT for CLBP were all associated with similar significant improvements, further, strong working alliance may represent a critical therapeutic process that both promotes and interacts with therapeutic techniques to influence outcome [6].

Previous study argued CBT might improve factors related to sleep disorders, while MBCT-Chronic Pain (CP) seemed to be more efficient to improve pain and QOL related variables. However, further research along these lines is strongly recommended [7]. The effect of MBSR on reduced anxiety, disaster of imagination, pain acceptance and its severity was sustained in prostate cancer patients [8-10].

In special, the evidence about the causal impacts of pain identification highlights a self-related factor of pain experiences that can be moderated by mindfulness [11]. However, further research is needed to investigate the day-to-day effects of meditation practice on pain, and continue to characterize the specific mechanisms of MBIs on head-

ache outcomes<sup>[12]</sup>.

Mindfulness-based exercises may be a useful complementary therapy for the treatment of chronic pelvic pain<sup>[13]</sup>. However, other study showed that there is no significant relationship between mindfulness and pain catastrophizing<sup>[14]</sup>. In other hand, a previous study suggests that app-delivered mindfulness meditation is effective for patients with chronic pain<sup>[15]</sup>. These novel findings demonstrate a significant role for expectations in mindfulness-based pain-relief. However, this role was minimal during saline and stronger during opioid blockade, despite similar pain reductions.

Although these above mentioned findings support growing evidences that mindfulness could engage multiple mechanisms to reduce pain, suggesting that mindfulness might be an effective pain-reducing technique even for individuals with low expectations for pain-relief<sup>[16]</sup>, but conducting more researches regarding relationship between pain and mindfulness is strongly recommended.

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