

Integrating Mindfulness Oriented Recovery Enhancement in Opioid Use Disorder: Effects on Craving, Pain, and Reward Processing

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Introduction

Opioid Use Disorder (OUD) continues to be a critical public health crisis globally, characterized by compulsive opioid seeking, persistent craving, high relapse rates, and impaired social and emotional functioning. Despite the availability of medication-assisted treatments (MAT) like methadone, buprenorphine, and naltrexone, long-term recovery remains elusive for many due to unresolved psychological distress, chronic pain, and impaired reward processing. In response to these challenges, Mindfulness-Oriented Recovery Enhancement (MORE) has emerged as a novel and evidence-based behavioral intervention that integrates mindfulness training, cognitive reappraisal, and savoring of positive experiences [1-5]. The central objective of MORE is to reshape attentional focus and emotion regulation, thus addressing the underlying neuropsychological mechanisms that perpetuate addiction. By targeting the disrupted reward circuitry in individuals with OUD, MORE offers a holistic strategy to reduce opioid misuse while enhancing psychological resilience. This paper discusses the role of MORE in reducing craving and pain, and in reactivating natural reward processes, thereby offering a complementary approach to pharmacological treatments for opioid addiction [6-10].

Discussion

Mindfulness-Oriented Recovery Enhancement is a multi-component therapeutic approach that blends mindfulness practices with cognitive-behavioral therapy and positive psychology principles. It was specifically designed to target the core mechanisms underlying addictive behavior, particularly in individuals suffering from OUD. One of the hallmark symptoms of opioid addiction is craving, a strong and often overwhelming urge to use opioids. Research has shown that MORE significantly reduces opioid craving by teaching individuals to observe their thoughts, emotions, and bodily sensations without judgment and to disengage from automatic reactive patterns. Through consistent mindfulness practice, individuals develop metacognitive awareness, which helps them recognize craving as a transient mental event rather than an irresistible command for action.

MORE also addresses the chronic pain that often co-occurs with OUD and serves as a primary motivator for opioid misuse. Unlike opioid-based pain treatments that work through neurochemical suppression, mindfulness practices enhance the brain's capacity for descending pain modulation. By increasing present-moment awareness and reducing catastrophizing thoughts about pain, MORE helps individuals tolerate discomfort more effectively and reduces their reliance on opioids for pain relief.

A critical component of MORE is its focus on the restoration of the reward system. Chronic opioid use impairs the brain's natural ability to experience pleasure from everyday activities—a condition known as hedonic dysregulation. MORE utilizes a technique called "savoring,"

which trains individuals to focus attention on positive and meaningful life experiences. This technique not only counteracts anhedonia but also reactivates dopaminergic pathways associated with natural rewards. Neuroimaging studies have demonstrated that individuals practicing MORE show increased activation in the prefrontal cortex and ventral striatum, regions involved in self-control and reward valuation, respectively.

Furthermore, cognitive reappraisal exercises in MORE help participants reinterpret negative emotional stimuli in a more adaptive light. This process contributes to improved emotional regulation and decreases stress-induced relapse, a common trigger for opioid use. The integration of all these elements fosters a shift from compulsive drug seeking to adaptive coping strategies and value-driven behavior.

Despite its benefits, the implementation of MORE is not without challenges. It requires trained facilitators, structured group sessions, and sustained engagement from participants, which may not always be feasible in resource-constrained settings. Nonetheless, its proven efficacy in reducing both subjective and neural markers of craving, improving pain tolerance, and enhancing natural reward sensitivity makes MORE a valuable adjunct to standard OUD treatment.

Conclusion

Mindfulness-Oriented Recovery Enhancement represents a promising advancement in the psychosocial treatment of Opioid Use Disorder. By targeting the psychological and neurobiological mechanisms of craving, pain, and reward dysfunction, MORE offers a multidimensional solution to one of the most persistent challenges in addiction medicine. Its integration into clinical practice alongside medication-assisted treatment could improve patient outcomes, decrease relapse rates, and promote long-term recovery. Future directions should focus on expanding access to trained practitioners, optimizing digital delivery methods, and conducting longitudinal studies to evaluate the sustained impact of MORE on opioid recovery. In conclusion, the mindful engagement with internal experiences facilitated by MORE empowers individuals not only to manage their addiction but also to rediscover meaning, pleasure, and agency in life beyond opioids.

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