

The Effect of Mindfulness-Based Compassionate Living Program on Anxiety, Psychological Well-being, Empathy, and Compassion Levels of Dentists

Onur Ucak Turer, Mustafa Ozcan, Bahar Alkaya, Furkan Demirbilek, H. Gokhan Kayhan, Gulsah Seydaoglu, M. Cenk Haytac

The dental profession is inherently demanding, often leading to chronic stress among practitioners. Chronic stress is associated with dysregulation of the hypothalamic-pituitary-adrenal axis, alterations in cortisol levels, and heightened inflammatory responses. Mindfulness-based self-compassion (MBCL) training has emerged as a promising intervention for mitigating occupational stress and enhancing well-being. This controlled clinical trial investigated the effects of an 8-week MBCL program on biochemical markers (cortisol, interleukin-6, interleukin-1 β , and oxytocin) and psychological outcomes (burnout, empathy, mindfulness, self-compassion, depression, and anxiety) in resident dentists. A total of 49 participants were assigned to either the MBCL training group or a control group. Post-intervention results indicated a significant decrease in cortisol, interleukin-6 and interleukin-1 β levels and an increase in oxytocin levels in the test group compared to controls. Additionally, participants reported reduced burnout, anxiety, and depression, along with enhanced self-compassion, mindfulness, and empathy. These findings suggest that MBCL training may serve as an effective strategy for promoting resilience and psychological well-being among dentists, with measurable biochemical correlates supporting its efficacy.

Biography

Onur Ucak Turer earned her PhD degree in Periodontology from Çukurova University, Turkey, in 2004. She becoming one of the youngest professors in Turkey at the age of 36 in 2014. Prof. Dr. Turer specializes in periodontal disease research and has authored over 60 peer-reviewed international publications. She is also among the contributing authors to the renowned textbook Newman and Carranza's Clinical Periodontology. In addition to her clinical and academic expertise, Prof. Dr. Turer is certified internationally as a Mindfulness-Based Stress Reduction and Mindfulness-Based Compassionate Living instructor. Since 2021, she has been actively integrating mindfulness and compassion-based programs into dentistry curricula and clinical practice, aiming to improve the well-being of dental professionals and patients. Her recent randomized controlled clinical trial exploring mindfulness-based interventions in reducing anxiety in dental patients was published in the prestigious journal Nature in 2024. A subsequent study on self-compassion and mindfulness in dentistry, evaluating biochemical and psychological outcomes, is currently under review in the same journal

oucak@cu.edu.tr

Abstract received : March 12, 2025 | Abstract accepted : March 17, 2025 | Abstract published : May 5, 2025