

Comparing The Effectiveness of Mindfulness-Based Cognitive Therapy with Emotion-Focused Therapy on Emotion Regulation in Patients with Peptic Ulcer

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Extended Abstract

Background and Objectives

Peptic ulcer disease (PUD) is one of the most common psychosomatic disorders, with a global prevalence estimated at 80–150 per 100,000 individuals. Beyond the serious gastrointestinal complications, PUD has significant psychosocial effects, including reduced quality of life, relationship difficulties, and workplace challenges. Psychological stress plays a critical role in the development and recurrence of peptic ulcers, exacerbating the disease through increased gastric acid secretion and altered hypothalamic-pituitary-adrenal axis functioning. Patients with chronic psychosomatic conditions, such as PUD, often struggle with emotional dysregulation, which may intensify their physical symptoms and hinder effective coping.

Therapies designed to enhance emotional regulation are increasingly considered essential in the management of psychosomatic conditions. Emotion-Focused Therapy (EFT) and Mindfulness-Based Cognitive Therapy (MBCT) are two promising non-pharmacological interventions. EFT is a humanistic, experiential approach focused on increasing emotional literacy and fostering healthier emotional processing, while MBCT integrates mindfulness principles with cognitive therapy techniques to enhance metacognition and reduce maladaptive thinking patterns. Both have demonstrated efficacy in improving emotional regulation across various populations, yet their comparative effectiveness among patients with PUD has not been fully clarified.

This study aimed to compare the effectiveness of MBCT and EFT on cognitive emotional regulation in patients with peptic ulcers. Identifying which approach provides greater benefit could support the development of targeted interventions to reduce psychological distress and improve disease outcomes in this population.

Materials and Methods

This semi-experimental study employed a pre-test, post-test, and three-month follow-up design with a control group. Participants were recruited via convenience sampling from specialized internal medicine clinics in

Mashhad, Iran, between January and March 2023. A total of 45 patients diagnosed with peptic ulcers were enrolled, with inclusion criteria comprising age between 18–50 years, minimum high school education, and absence of comorbid chronic diseases or psychotic disorders. Exclusion criteria included missing more than two sessions or alcohol/drug dependency.

Participants were randomly assigned to one of three groups: MBCT (n = 15), EFT (n = 15), or control (n = 15). Both intervention groups received eight 90-minute weekly sessions delivered in small groups (7–8 patients). MBCT sessions, based on the framework by Teasdale and Segal, incorporated mindfulness practices such as body scanning, conscious breathing, and mindful awareness of thoughts and feelings. EFT sessions, structured according to Greenberg and Geller, focused on increasing emotional awareness, addressing unresolved emotional experiences, and fostering secure attachment-related interactions. The control group did not receive any psychological intervention during the study period but continued their routine medical care.

The primary outcome measure was cognitive emotion regulation, assessed at baseline, post-intervention, and three-month follow-up using the Cognitive Emotion Regulation Questionnaire (CERQ) developed by Garnefski and Kraaij (2007). This validated instrument evaluates adaptive strategies (e.g., positive reappraisal, acceptance, planning) and maladaptive strategies (e.g., rumination, catastrophizing, self-blame). Data were analyzed using repeated measures analysis of variance (ANOVA) and Bonferroni post hoc tests, with a significance level set at $p < 0.05$.

Results

Baseline demographic variables, including age, gender, education level, and marital status, did not significantly differ across the three groups ($p > 0.05$). Repeated measures ANOVA revealed significant time \times group interactions for both adaptive ($F = 31.18, p = 0.001, \eta^2 = 0.61$) and maladaptive ($F = 25.36, p = 0.001, \eta^2 = 0.56$) cognitive emotion regulation.

Post hoc analyses indicated that both MBCT and EFT significantly increased the use of adaptive emotional regulation strategies from pre-test to post-test and follow-up ($p = 0.001$), while maladaptive strategies significantly decreased across the same time points ($p = 0.001$). The control group did not demonstrate significant changes in either domain.

At follow-up, mean adaptive regulation scores in the MBCT group increased from 17.92 ± 3.42 at baseline to 26.57 ± 5.28 , while the EFT group's scores improved from 18.14 ± 3.10 to 27.92 ± 5.53 . Maladaptive regulation scores decreased from 19.14 ± 3.23 to 12.92 ± 2.20 in the MBCT group and from 20.57 ± 3.77 to 14.71 ± 3.09 in the EFT group. However, there were no statistically significant differences between MBCT and EFT in their effects on adaptive ($p = 0.56$) or maladaptive ($p = 0.22$) emotion regulation strategies.

Discussion and Conclusion

The findings indicate that both MBCT and EFT are effective in enhancing emotional regulation in patients with peptic ulcers, with improvements maintained at three-month follow-up. Neither approach, however, was found to be superior to the other in terms of efficacy.

EFT helps patients access, express, and process underlying emotions, reducing emotional dysregulation. MBCT cultivates present-moment awareness and non-judgmental acceptance, reducing maladaptive patterns such as rumination and catastrophizing. Both interventions share common therapeutic elements—such as structured homework, skill practice, and improved relationships with thoughts and emotions—which may account for the comparable outcomes.

Given the high prevalence of emotional dysregulation among patients with psychosomatic conditions, integrating either MBCT or EFT into standard care could reduce distress and improve quality of life. The choice between interventions can be guided by patient preference, therapist expertise, and resource availability. Limitations include small sample size, single-site recruitment, and lack of assessment of physical indicators of disease severity. Future studies should replicate findings in larger, more diverse populations and explore long-term psychological and medical outcomes.

In conclusion, both MBCT and EFT significantly improve adaptive emotion regulation and reduce maladaptive strategies in patients with peptic ulcers. These findings support incorporating evidence-based psychological interventions into multidisciplinary care for PUD, tailoring approaches to patient characteristics and preferences.