# Efficacy of Mindfulness-Based Stress Reduction Training on Social Adjustment and Self-Care Behaviors in Cardiac Patients with Signs of Depression (After Open Surgery)

Azari Ghahfarrokhi, Z., et al.

#### **Extended Abstract**

#### Aim

The present study was conducted to investigate the effectiveness of mindfulness-based stress reduction training on social adjustment and self-care behaviors of cardiac patients with signs of depression (after open surgery).

## Methodology

The present study was a quasi-experimental design with pretest, posttest, control group, and 2-month follow-up period. The statistical population of the study included patients who had undergone open heart surgery and were admitted with depressive symptoms to specialized cardiac hospitals (Chamran, Sina, and Milad) in Isfahan in the second half of 2019. Thirty-five cardiac patients with signs of depression were selected by purposive sampling and randomly divided into experimental and control groups (16 patients in the experimental group, including 11 women and 5 men, and 19 patients in the control group, including 13 women and 6 men). The experimental group received eight seventy-five-minute sessions of mindfulness-based stress reduction interventions (using the package based on the Kabat-Zain protocol (2013)) two months before cardiac surgery. The questionnaires used in this study included the Depression Questionnaire (DQ), the Social Adjustment Questionnaire (SAQ), and the Self-Care Behavior Questionnaire (SCQ). The data of the study were analyzed by repeated measures ANOVA using SPSS-23 statistical software.

## **Findings**

The results showed that mindfulness-based stress reduction training had a significant effect on the social adjustment and self-care behaviors of cardiac patients with signs of depression (p<0.001). The results of the present study suggest that mindfulness-based stress reduction training can be used as an effective intervention to improve social adjustment and self-care behaviors in cardiac patients with signs of depression by using techniques such as mindful attitudes, mindful activities, addressing problematic feelings and emotions, and breathing exercises to manage anger. These techniques regulate adrenaline and cortisol hormones in the body and eliminate symptoms such as excessive rumination and judgment about the internal and external world and reduce symptoms of depression, because mental wandering and dwelling on the past and future lead to an increase in negative emotions such as depression in heart patients, emotions that exacerbate symptoms of heart disease such as palpitations, shortness of breath, angina, fatigue, and sexual problems.

Another explanation is that mindfulness-based stress reduction sessions reduce stress and promote self-management skills and flexibility in dealing with stressful events, as well as physical skills and mental health. Thus, mindfulness-based training to reduce stress by developing new mental, cognitive, and social skills in cardiac patients with depressive symptoms will enable these patients to benefit from more adaptive coping strategies in the face of challenging and stressful situations. This process may also provide the basis for expanding social interactions and improving social adjustment by reducing avoidant behaviors such as avoiding communication with others.

## Conclusion

Reducing depression symptoms also improves patients' family and social interactions and increases their social adjustment. It also improves mindfulness, physical introspection, and body awareness, leading to improved self-care and, by increasing healthy behaviors such as walking, eating right, interacting with others, and following therapeutic patterns, decreasing unhealthy behaviors. It forms the basis for improving the health status of patients with coronary heart disease.

**Keywords:** Cardiac Patients, Depression, Mindfulness-Based Stress Decrease Training, Self-Care Behaviors, Social Adjustment.