# Implementation of a Stress Management Education Module in Cardiac Rehabilitation

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## Introduction

Stress Management Education is a vital component of cardiac rehabilitation (CR) programming; however, many programs struggle with finding time to provide adequate education to their patients. As a result, patients may fail to achieve beneficial decreases in stress levels.

## Purpose

To introduce a self-led stress management education module for patients to complete during rehab sessions and compare stress assessment outcomes to patients who did not complete the education module.

## Design

55 subjects (14 women and 41 men, age 36 to 81) enrolled in the CR program at The Heart Hospital Baylor Plano and had a high stress assessment score or self-identified with a high stress level were asked to complete a stress management module during their CR program. The module consisted of 17 self-led lessons and participants were asked to complete one lesson each exercise visit. Each lesson took approximately 10 minutes to complete. The participant completed another ISMASQ upon completion of their CR program. Continuous variables are reported as mean±standard deviation. Differences in pre and post scores within groups were assessed via paired t-tests. Differences between groups were assessed via two sample t-tests.

## Methods

Subjects completed the International Stress Management Association Stress Questionnaire (ISMASQ) upon entry to CR. If the participant’s score was 14 points or greater or patient self-identified a high stress level, staff asked patient if they would complete a stress management module during their CR program. The module consisted of 17 self-led lessons and participants were asked to complete one lesson each exercise visit. Each lesson took approximately 10 minutes to complete. The participant completed another ISMASQ upon completion of their CR program. Continuous variables are reported as mean±standard deviation. Differences in pre and post scores within groups were assessed via paired t-tests. Differences between groups were assessed via two sample t-tests.

## Results

Patients in the education group completed a median of 13 (10, 17) modules, had an average pre-test score of 12.4 ± 4.3, and an average post-test score of 8.8 ± 4.9. On average, individuals’ scores decreased by 3.6 ± 4.7 points (p=0.002), with an average of 27.6% decrease in stress level. Similarly, those not participating in the stress management education had an average pre-test score of 12.7 ± 4.0 and average post-test score of 10.8 ± 5.0. On average, individuals’ scores decreased by 1.96 ± 4.3 points (p=0.03), with an average decrease of 13.9% in stress level. While both groups’ scores decreased significantly over time, the changes in score did not differ between the groups (p = 0.19).

## Conclusion

Although not statistically significant, patients with (perceived) high stress levels who participated in a structured stress management education module during their CR program benefited by lowering their stress levels by 13.7 more percentage points than patients with a high stress level who did not participate in the education module. Incorporating a stress management education module in addition to regular CR programming is an easy, inexpensive way for CR programs to improve their stress management education and outcomes.