



## Abstract

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**Project Title:** CHANGE: AN INTERVENTION TO INCREASE EXERCISE MAINTENANCE

**Abstract:** *Cardiac rehabilitation (CR) following an acute cardiac event has been shown to increase cardiovascular functional capacity, decrease myocardial demand, and improve blood pressure control, weight control, and lipid levels. However, continued exercise is required to sustain these effects. Yet only 30 to 60% of individuals are still exercising at 6 months after the completion of the CR program. Using a randomized clinical trial, this study will test an intervention to increase individuals' exercise maintenance following a CR program. Titled "Change Habits by Applying New Goals and Experiences" (CHANGE), the intervention consists of five small- group counseling and behavior modification sessions in which participants are taught self-efficacy enhancement, problem-solving skills, and relapse prevention strategies. The study questions are: 1. Does the CHANGE intervention improve exercise maintenance of women and men during the year following completion of a cardiac rehabilitation program? 2. Do the effects of the intervention on exercise maintenance during the first year following completion of a CR program differ by gender? 3. Does the CHANGE intervention extend the time individuals continue an exercise maintenance regimen during the year following completion of a CR program for women and for men? 4. Do the effects of the intervention hold when controlling for the effects of covariates: age, body fat, heart failure, co-morbidity, angina, muscle or joint pain, depression, and social support? 5. Do problem-solving skills, motivation, health beliefs, and self-efficacy mediate the effects of the intervention on exercise maintenance? 6. What are the acceptability and resource requirements of the CHANGE intervention? Two hundred and eighty individuals (140 men and 140 women) who are recovering from a myocardial infarction, coronary artery bypass graft surgery or*

*angioplasty will be randomly assigned to the CHANGE intervention or the usual CR program. Measures of exercise maintenance (number of minutes exercised over the study period, number of minutes exercised within the target heart rate zone, mean number of exercise sessions per week, and metabolic equivalents (METS) expended) will be taken for 1 year following completion of a CR program and compared. Exercise will be measured using heart rate wristwatch monitors, exercise diaries, & a 7-Day Recall Survey. The effect of the covariates age, body fat, heart failure, co-morbidity, angina, muscle or joint pain, depression, adherence to other cardiac risk factor modification behaviors and social support will be assessed. Problem-solving skills, motivation, health beliefs about exercise, and exercise self-efficacy also will be measured before and after the intervention is applied. Analyses will examine the effects of the CHANGE intervention over time in both men and women.*

**Thesaurus Terms:**

*behavior modification, cardiovascular disorder prevention, exercise, health behavior, human therapy evaluation, nursing intervention, rehabilitation, therapy compliance clinical trial, coronary bypass, gender difference, group counseling, heart disorder, myocardial infarction, self concept behavioral /social science research tag, clinical research, human subject, medical rehabilitation related tag*

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