

RC8804-0114

Effectiveness Comparison between Hospital-Based and Home-Based Exercise Training Program among Coronary Artery Disease Patients

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8508 ~ 8607

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Aerobic exercise training program Coronary artery disease Cardiac rehabilitation Home-based walking program

(I)

(II)

37

60-80%

(VO₂max)

SPSS/PC+

Cardiac rehabilitation, particularly the exercise training, has been regarded as a necessary treatment in coronary artery disease patients in the USA. Because of lack of specific knowledge and personnel, however, cardiac rehabilitation has not been applied to CAD patients in Taiwan. Although

physicians and nurses always encourage these patients to exercise, they do not direct them on how to do it correctly. Therefore, the specific aim of this study is to offer either a hospital supervised or a home-based exercise training program to coronary artery bypass graft (CABG) patients. The major purpose of this study was (1) to compare the effectiveness of those two exercise training programs and (2) to examine the influence of self-efficacy, self-motivation, and barriers on the exercise behavior and exercise outcomes. A quasi-experimental design was used in this study. A total of 37 CABG patients who met the selection criteria enrolled into either hospital supervised exercise training group or home-based exercise training group, voluntarily. The hospital supervised training program was set between 60% and 80% of maximal functional capacity (VO₂max). The home-based exercise training program was a 12-week walking program based on the guidelines recommended by the American Heart Association. The mediator variables are exercise self-efficacy, self-motivation, and barriers. The dependent variables include VO₂max, quality of life, and daily activity level. All subjects were scheduled for the Graded Exercise test (GXT) and requested to fill out the Exercise Self-Efficacy Inventory, the Self-Motivation Inventory, the Exercise Barriers Scale, and the MOS 36-item Short-Form Health Survey (SF-36), before, at the 12th week, and the 24th week after the study was started. The SPSS/PC+statistical software package was used for data analysis. The results of the study demonstrated no significant difference in exercise outcome between the hospital supervised and home-based exercise training groups. The exercise self-efficacy was a significant predictor in exercise behavior and in maximal oxygen uptake and quality of life after 12 weeks exercise training. Both exercise intensity and rating perceived exhaustion during exercise training can predict maximal oxygen uptake after 12 weeks and 24 weeks exercise training. However, rating perceived exhaustion during training was a significant predictor in quality of life after exercise training.