

Improving physical activity status of patients with heart failure by using family-centered empowerment model

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Introduction: Among the factors that affect human health. Increase mean age of the population, Changing food consumption pattern, The prevalence of risk behaviors and rapid growth of urbanization are very important. These changes, along with decreased physical activity have caused chronic non-communicable diseases, particularly, heart failure were considered as major health problems⁽¹⁾. Heart failure is an important part of heart disease^(2,3). Patients with chronic heart failure with symptoms such as shortness of breath, fatigue, swelling of the knee and objective evidence of cardiac dysfunction is resting. Research shows exercise can increase the patient's quality of life⁽⁴⁾. Due to the family's influence on physical activity status of patients, family participation in modifying physical activity habits seem necessary. The aim of this study was to evaluate the effect of family-centered empowerment model on improving the physical activity status of patients with heart failure.

Methods and Materials: this is an interventional two group study on 70 heart failure patients in Shiraz. After convenience sampling, patients were divided into two control and test groups by block randomization Method. The intervention based on family-center empowerment model performed during 5 sessions. Research tools were demographic information and physical activity dimension of lifestyle questioners. Regarding the research aims chi-square, independent T-tests, and paired T-tests were used for analyzing data.

Results: Both test and control groups was similar regarding their demographic information ($P > 0.05$). Before intervention in physical activity dimension, all measures of two groups were equal ($p > 0.05$) but after the intervention, meaningful statistical differences recorded in this dimension ($P < 0.05$).

Discussion: Generally, the result of this study revealed that heart failure patients showed more positive changes in their physical activity status after the educational intervention compared with before; in the other hands mean score from 2.97 ± 3.55 to 12.08 ± 2.84 changed. The results of a fairly similar study revealed that patients who had participated in training class of physical activity with their wives had more weight loss⁽⁵⁾. Also, comparison of the impacts of family-based and individual-based training on body mass index decrease and lifestyle promotion was done in another study. The researcher concluded that after the intervention the mean body mass index

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decreased in both groups; besides, the mean of dairy and fruit consumption and physical activities significantly increased⁽⁶⁾. These results confirm those of the present study

Conclusion: Performing the family-center empowerment model for heart failure patients is practically possible and lead to improvement or refinement of the physical activity status of them and their families.

Key words: family centered empowerment model, Heart failure patients, physical activity.