居家行走運動計畫對心血管疾病危險群婦女危險因子及情緒狀態之影響

Effects of a Home-Based Walking Program on Cardiovascular Disease Risk Factors and Mood Status Among High Risk Women

中文摘要

在現今二十一世紀的工商業社會中，心血管疾病是導致婦女死亡率的主要原因之一，而婦女面臨更年期荷爾蒙的變化，也相對提升對婦女健康的威脅，文獻顯示，經由運動可降低心血管危險因子，因此，本研究主要目的在探討居家行走運動計畫對心血管疾病危險群婦女危險因子及情緒狀態之影響。

本研究採用準實驗性研究設計方法，以居家行走運動訓練計畫、情緒狀態評估量表做爲測量工具，採立意取樣，針對北部某區域教學醫院，35-65 歲心血管疾病高危險群之婦女，採隨機分配爲運動組及控制組，運動組 23 名婦女及對照組共 24 名婦女；運動組婦女參與十二週、每週三次、每次三十分鐘之居家行走運動訓練，並以手腕型心搏速率測量器觀察婦女之運動心率，對照組則維持一般日常活動，兩組婦女將於訓練計畫前、第八週與第十二週，各測量其運動成效與填寫情緒狀態評估量表，分析研究結果以 SPSS 11.5 版軟體進行資料分析，如百分比、平均值、標準差、t-檢定、卡方檢定、二因子變異數分析及克-瓦二氏單因子等級變異數分析。

研究結果發現：(1) 本研究婦女最爲普遍的心血管疾病危險因子，包含已停經狀態、體重過重、高膽固醇血症、低密度脂蛋白膽固醇指數偏高與最近生活上自覺有壓力情形。(2) 婦女經十二週居家行走運動後，於體重、身體質量指數、腰圍、靜態收縮壓等心血管疾病危險因子均顯著改善，而靜態舒張壓、空腹血糖血脂肪等均無顯著變化。(3) 婦女之情緒狀態方面，以“精神-活力”得分爲最高，以“憂鬱-沮喪”得分最低。(4)採取 12 週居家行走運動訓練，在婦女的情緒狀態方面，於“疲憊-懶散”平均得分有顯著改善(p=.004)。

居家行走運動是最安全且方便的運動，對於體重過重之婦女，經由 12 週居家行走運動訓練，可有效降低婦女體重、身體組成、靜態收縮壓及疲憊-懶散之情緒狀態。

英文摘要

In the modern industrial society of 21th century cardiovascular disease is one of major cause of mortality for women, change sexual hormone during the menopause with put threat on the health of women. Exercise can effectively decrease risk factors of cardiovascular disease.

The purposes of the study were to evaluate the effects of a home-based walking program on cardiovascular disease risk factors and mood status among high risk women. A quasi-experimental design were used in this study. The subjects are women with high risk in cardiovascular disease aged between 35 and 64. They were randomized assigned into either exercise or control groups, 23 in the exercise group and 24 in the control, the exercise group participated in a 12-weeks home-based exercise program. three times a week, 30 minutes each time. The control group remained their living pattern. Data on the short form of Profile of Mood States (SF-POMS), exercise testing and biochemical blood examination of each subject were collected prior to the study, at the 8th week, and the 12th week of the study. The data were analyzed by using percentage, mean, standard deviation, t-test, Chi-square, two factors repeated-measures ANOVA and Kruskal-Wallis one way analysis of variance by ranks.

Results of the study showed: (1)the most common cardiovascular risk factors observed in women were: menopause status, stress perception, high body mass index, high level of blood total cholesterol and low-density lipoprotein; (2)body weight, body mass index, waist to hip circumference, resting systolic blood pressure decreased significantly ($p<.05$) in the exercise group after 12-weeks regular exercise training. However, no significant differences were found in fasting plasma glucose level and blood lipid profile among the exercise participants. (3)the highest score was observed in"Vigor-Activity"subscale on the SF-POMS and the lowest score was observed in"Depression-Dejection"subscale.

Home-based walking is the most safety and convenient exercise. By home-based walking, it could effectively decrease women's body weight, body mass index, resting systolic blood pressure and mood of Depression.