

# 太極拳訓練對改善老年高血壓個案之健康信念、健康狀況與運動行爲之成效

## Effect of Tai-Chi Chuan Training on Health Belief、Health Status and Exercise Behavior in Hypertensive Elderly

### 中文摘要

本研究目的在探討太極拳運動訓練對改善老年高血壓個案之健康信念、健康狀況與運動行爲之成效及其影響之相關因素。本研究採類實驗研究設計，運用健康信念模式，以方便取樣法選取臺北縣某二家榮民之家 65 歲以上患有高血壓之老年人為研究對象，並區分為實驗組（n=14）與控制組（n=25）。實驗組參與為期十週的太極拳運動訓練，控制組則維持其原有的生活型態，運動訓練前經結構式問卷，收集研究對象基本資料、對高血壓防治之認知、健康信念、健康狀況、運動行爲並施予健康體適能前測。運動訓練十週後，再收集其對高血壓防治之認知、健康信念、健康狀況、運動行爲及施予健康體適能後測。研究結果以 SPSS10.0 套裝軟體進行統計分析。

本研究對象平均年齡為 77.1 歲，實驗組以高（職）中（含）以上、有宗教信仰者、已婚居多；控制組則以國（初）中（含）以下、無宗教信仰者、單身為主要。兩組研究對象在對高血壓防治之認知得分、健康信念與自覺健康狀況前測方面，在統計分析並無不同；然而在平均舒張壓前測方面，顯示原本實驗組對於血壓值的控制就優於控制組。經由本研究十週太極拳運動訓練後結果發現：（一）實驗組在健康信念四要素題目前後測改善程度部分，在統計學上並無顯著差異存在；（二）實驗組在健康狀況後測方面，身體質量指數比控制組少 2.37Kg/m<sup>2</sup>；在心肺耐力部分 1600 公尺走路比控制組快 258.16 秒，並達統計上顯著差異，而實驗組於太極拳訓練前、後健康狀況之改善情形，結果發現平均收縮壓在統計學上達顯著改善。另外，兩組研究對象健康狀況前後測改善部分，結果在平均舒張壓部分有達顯著差異，然因前測時實驗組的舒張壓就比控制組來的好，所以，可能造成後測才會呈現控制組改善的幅度較實驗組明顯；（三）在運動種類後測方面，以伸展操及太極拳兩者達顯著差異，顯示實驗組經十週太極拳訓練後，仍持續執行太極拳運動行爲；（四）年齡與肌力改善程度達顯著性負相關、無宗教信仰者其平均舒張壓有顯著改善。

根據本研究結果顯示，太極拳運動訓練介入能有效地改善老年高血壓個案之部分健康狀況與運動行爲，因此可提供醫護人員在設計社區老年人健康促進與運動保健服務時之參考依據。

關鍵詞：太極拳訓練、高血壓、認知、健康信念、健康狀況、運動行爲

## 英文摘要

The purpose of this study was to explore the effects of Tai-Chi Chuan exercise training on the health belief, health status, and exercise behavior in hypertension elderly. The quasi-experimental design and Health Belief Model was utilized in this study. Hypertensive subjects who were sixty-five years old and over were recruited from two veterans homes in Taipei county and were divided into two groups : the experimental group (n=14) and the control group (n=25). The elderly in experimental group took the regular Tai-Chi Chuan exercise training for ten weeks, and the control group one continued their usual lifestyles during the study period. The demographic data, health belief, health status, and exercise behavior of the two groups were collected through the structured questionnaire, and health fitness status of these two groups were measured before and after ten weeks. The results were analysis with statistics software (SPSS 10.0).

The average age of the elderly in this study is 77.1 years old. The majority of the elderly was high school graduates, married, and had religious belief in the experimental group ; on the other hand, subjects in the control group was in middle school level(or below), still single, and had no religious belief. There was no significant difference between the two groups in their hypertension related knowledge, health belief, and perceived health status. The average diastolic blood pressure showed that the experimental group had a better health status than control group in pretest. After 10 weeks, regular Tai-Chi Chuan exercise training results were shown as follows: (1)There was no significant improvement in either domain of the health belief in the experimental group. (2) In term of health status, the experimental group's mean body mass index was 2.37kg/m<sup>2</sup> less than the control one. In 1600m walking test, the experimental group was 258.16 second faster than the control group in term of cardiorespiratory endurance. Also, there was a significant improvement in average systolic blood pressure control before and after Tai-Chi Chuan training in the experimental group. However, there was a significant difference in the improvement of diastolic blood pressure between 2 groups. The average improvement of diastolic blood pressure of the control group shown better may be due to the diastolic blood pressure of the experimental group was already better than the control one before test. (3)In post test, the experimental group showed more complied in the exercises of stretching and Tai-Chi Chuan training, it showed that after taking the Tai-Chi Chuan training, the experimental group maintained their exercise behaviors.(4)There was a negative correlation between age and the improvement of muscular strength. Those without religious belief showed better improvement in average diastolic blood pressure.

Base on the results of the study, hypertensive elderly's health status and exercise

behavior could be partially improved by Tai-Chi Chuan exercise training. And it could provide the reference for health care providers to design the health promotion and exercise service for the elderly.

Keywords : Tai-Chi Chuan training, hypertension, knowledge, health belief, health status, exercise behavior