

## Study on the effect evaluation of Chinese medicine health management in patients with hypertension

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**Abstract:** Objective: To analyze the effect of TCM health management on patients with hypertension. Methods: 100 patients with hypertension were selected as subjects. These patients were randomly divided into a regular health management group and a TCM health management group, each with 50 patients. Regular health management was performed for patients in the general health management group, and TCM health management was performed for patients in the TCM health management group. After the end of health management, the effects of health management in the two groups were compared. RESULTS: After the end of health management, the total effective rate of health management in the TCM health management group was higher than that in the conventional health management group, and the difference was statistically significant ( $P < 0.05$ ). The satisfaction rate of patients with TCM health management group was higher than that of the conventional health management group, and the difference was statistically significant ( $P < 0.05$ ). The incidence of cardiovascular and cerebrovascular diseases in the TCM health management group was lower than that in the conventional health management group, and the difference was statistically significant ( $P < 0.05$ ). Conclusion: The effect of TCM health management on elderly hypertensive patients is ideal.

### 1. Introduction

Hypertension is a lifelong illness. This disease is the main cause of cardiovascular and cerebrovascular diseases. The elderly are high-risk people with high blood pressure. According to the survey data, at least half of the elderly in China are hypertensive patients. Elderly patients with hypertension have low compliance with medication and their blood pressure control is poor. The study found that patients with hypertension should be treated with targeted health management to ensure the effectiveness of their treatment. TCM health management is a new management model that has been widely used in the health management of patients with hypertension. In order to further explore the effect of TCM health management on patients with hypertension, the author conducted this study. The report is as follows.

### 2. Objects and methods

#### 2.1 Research object

The object of this study was 100 hypertensive patients treated in a hospital. These patients were randomly divided into a regular health management group and a TCM health management group. In the regular health management group, there were 30 males and 20 females. Their age ranged from 60 to 75 years, with an average of  $(67.5 \pm 13.3)$  years; the course of disease was 5 to 8 years, with an average of  $(6.5 \pm 1.5)$  years. In the TCM health management group, there were 25 males and 25 females. Their age ranged from 58 to 75 years, with an average of  $(66.5 \pm 12.3)$  years; the course of disease was 5 to 7 years, with an average of  $(6.0 \pm 1.0)$  years. There was no significant difference in the general data between the two groups ( $P > 0.05$ ), which was comparable.

## **2.2 Health management methods**

### **2.2.1 Health management methods for patients in the general health management group**

Routine health management of patients in the general health management group. The specific management method is: the clinician guides the patient to eat light, digestible, high-nutrient food, and guides him to perform appropriate physical exercise to monitor the blood pressure level.

### **2.2.2 Health management methods for patients in the TCM health management group**

TCM health management for patients in the TCM health management group. The specific management methods are as follows: 1) The clinician guides the adjustment of eating habits according to the specific conditions of the patients, and informs them that the daily diet should be based on light, digestible and highly nutritious foods, suitable for combination of meat and vegetable, cold and softness. The clinician prescribes a prescription for the patient and informs him about how to cook and consume the medicated diet. Inform patients to drink less tea, explain which types of tea are suitable for high blood pressure patients, and explain the brewing methods of such teas. The clinician conducts targeted dietary guidance based on the TCM syndrome differentiation of the patient's hypertension. Patients with hypertension who are informed of qi and blood deficiency should eat foods that have blood, heat, and detoxification effects, such as jujube, white fungus, sesame, and mulberry. And told them that they should eat more medicinal herbs such as stewed trotters, simmered steamed chicken, and drink tea such as longan red jujube tea and Codonopsis jujube tea. Patients with hypertension who tell the liver and kidney yin deficiency should eat foods that have no effect on nourishing liver and kidney, such as sputum, pork, green bamboo shoots, spinach and so on. And told them to drink more tea such as Jerusalem artichoke tea, Sanxian tea. Patients with hypertensive patients who are told to have liver-yang hyperactivity should eat foods that have the effect of clearing heat and calming the liver, and clearing the wind and eyesight, such as celery, scutellaria, and watermelon rind. Inform them to eat more chrysanthemum porridge, drink more fresh celery juice. 2) The clinician conducts life guidance for the patient. Inform patients to keep the room environment clean and comfortable, and regularly ventilate the room to ensure adequate sleep and develop good habits. 3) The clinician performs motion management on the patient. Inform patients to exercise appropriate amount of physical activity every day, such as tai chi, jogging, etc., and inform them that the above exercise can effectively promote the blood circulation of the limbs, and the exercise intensity can be tolerated by the body, and gradually increase according to the physical condition. The amount of exercise. 4) The clinician treats the patient with auricular acupressure and TCM foot bath therapy. The method of performing ear acupoint pressing treatment is as follows: the Wang does not leave the seed pressure on the acupuncture points of the patient's ear, the Shenmen acupoint, and the like, and the tape is fixed and fixed. The clinician presses the above acupuncture points of the patient with the thumb and forefinger. When the patient's auricle is slightly hot and painful, stop pressing the ear. The method of traditional Chinese medicine foot bath treatment is: put the Chinese herbal medicines such as *Prunella vulgaris*, *Achyranthes bidentata*, and cinnamon into the water, and then decoct the juice, and then pour the liquid until it is warm, then pour it into the footbath. It is advisable to pass the patient's ankle. Then, instruct the patient to press points such as Yongquan, Shenshu, Taixi, Sanyinjiao, Fengchi and Neiguan.

## **2.3 Assessment criteria for health management effectiveness**

The effects of health management are divided into three criteria: Significant effect, effective, and ineffective. Significant effect means that the patient's blood pressure control is better. Effective means that the patient's blood pressure is controlled in general. Invalid means that the patient's blood pressure control is poor. Total effective rate = (Significant effective number of cases + number of effective cases) / total number of cases × 100%. A health management satisfaction questionnaire was issued for both groups to investigate their satisfaction with health management. The questionnaire is divided into two criteria: satisfaction and dissatisfaction.

## 2.4 Statistical methods

The data in this study was processed using SPSS 19.0 statistical software. The mean age and duration of disease in both groups were expressed as mean  $\pm$  standard deviation (  $\bar{x} \pm s$  ), and using the t test. The total effective rate of health management, awareness of hypertension health management knowledge, and incidence of cardiovascular and cerebrovascular diseases were expressed as a percentage (%), and using the  $\chi^2$  test.  $P < 0.05$  indicates that the difference was statistically significant.

## 3. Results

### 3.1 Comparison of health management effects between the two groups of patients

After the end of health management, the total effective rate of health management in the TCM health management group was higher than that in the conventional health management group, and the difference was statistically significant ( $P < 0.05$ ). See Table 1 for details.

Table 1 Comparison of health management effects between the two groups

Group	Significant effect(n)	effective(n)	invalid(n)	Total efficiency (%)
General Health Management Group (n=50)	15	20	15	70
TCM Health Management Group (n=50)	20	29	1	98
$\chi^2$				14.583
P				<0.05

### 3.2 Comparison of health management satisfaction between the two groups of patients

The results of the survey showed that the satisfaction rate of patients in the TCM health management group was 96.0% (48/50), and the satisfaction rate of patients in the general health management group was 70.0% (35/50). Patients in the TCM health management group were more satisfied with the health management than the patients in the regular health management group. Statistically significant ( $P < 0.05$ ).

### 3.3 Comparison of the incidence of cardiovascular and cerebrovascular diseases in the two groups

During the health management period, the incidence of cardiovascular and cerebrovascular diseases in the TCM health management group was 2.0% (1/50), and the incidence of cardiovascular and cerebrovascular diseases in the general health management group was 10.0% (5/50). The incidence of cardiovascular and cerebrovascular diseases in the TCM health management group was lower than that in the conventional health management group, and the difference was statistically significant ( $P < 0.05$ ).

## 4. Discussion

Hypertension is a common chronic disease in the clinic. The majority of patients with this disease are elderly. The study found that high blood pressure is easy to cause cardiovascular and cerebrovascular diseases such as stroke and acute myocardial infarction, which seriously endangers the health of the elderly. Clinically, patients with hypertension are usually treated with drugs. Recent studies have found that TCM health management for elderly hypertensive patients can ensure the effectiveness of antihypertensive therapy. The traditional health management model intervenes in the daily diet and exercise of hypertensive patients to control the total calorie intake of their body daily, and thus control their blood pressure. Since this method does not take into account the difference in physical fitness of hypertensive patients, the effect is not satisfactory. TCM health management is a brand-new management concept, which refers to a process of comprehensive and

scientific management of people suffering from certain chronic diseases using traditional Chinese medicine. The results of this study confirmed that the effect of TCM health management on patients with hypertension is ideal.

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## **References**

- [1] Wan Jie. Analysis of TCM Constitution and Health Management Effect in Patients with Hypertension in Community[J]. Hubei Journal of Traditional Chinese Medicine, 2013, 35(1): 20-21.
- [2] Zhai Yuanxin. Thoughts on TCM “Treatment of Diseases” in the Community of Hypertension and Diabetes[J]. Chinese Community Physician (Medical), 2012(22): 12.
- [3] LIU Deng, WANG Zhi-quan, CAO Hai-tao, et al. Research and practice of health management service model for hypertension in traditional Chinese medicine[J]. Chinese Journal of General Practice, 2013, 11(11): 1751-1753.
- [4] Xin Furong, Han Xuejie, Liu Xingfang, et al. Research progress and review of traditional Chinese medicine in the treatment of hypertension[J]. World Journal of Integrated Traditional Chinese and Western Medicine, 2013 (06): 638-641.
- [5] Liu Shining. Application of Traditional Chinese Medicine “Treatment of Diseases” in Community Public Health Services[J]. Chinese Community Medicine (Medical Science), 2012 (24): 196-197.
- [6] Tang Huairong. Study on the effect of health management on blood pressure control in elderly hypertensive patients[J]. West China Medical Journal, 2013 (08): 1264-1265.