

# Effect Evaluation of TCM Preventive Health Management Guiding the Health Management of Elderly Diabetes



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## Abstract

**Objective:** To evaluate and analyze the effect of TCM preventive health management in guiding the health management of elderly diabetes mellitus. **Methods:** Included in our hospital in May 2019 to June 2021 treated 120 cases of elderly diabetes patients, double-blind randomized method is divided into the experimental group and control group in the two groups (n = 60) and control group patients with routine treatment for diabetes management, on the basis of the experimental group patients in the control group to carry out the cure not ill health management idea guidance, health management over 12 months later, the effect of blood glucose control and self-management behavior were evaluated and compared between the two groups. **Results:** Management 12 prognosis, the experimental group, 2 h postprandial blood glucose and fasting glucose in patients with glycosylated hemoglobin were lower than the control group, difference has statistical significance ( $P < 0.05$ ), the control group, 2 h postprandial blood glucose and fasting glucose glycosylated hemoglobin levels compared with before the management such as no statistical difference ( $P > 0.05$ ), the experimental group SDSCA scale increases, the total score. Compared with the control group and before management, the differences were statistically significant ( $P < 0.05$ ), and the SDSCA score of the control group did not change significantly. **Conclusion:** TCM preventive health management guiding the health management of elderly patients with diabetes can improve the effect of blood glucose control and self-management ability.

## Keywords

TCM preventive health management, Elderly patients, Diabetes, Health management, Self management behavior

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## 1. Introduction

Under the background of the high incidence of chronic diseases, the pathological changes gradually become a threat to the elderly health and life security of lesion types [1], is one of the most common chronic diseases, diabetes is about diabetes pathogenesis is not fully clear, and lack of specific treatment, clinical control of the pathological changes of drug intervention, Supplemented by the adjustment of life behaviors and habits [2-3]. In traditional

Chinese medicine, diabetes falls under the category of "thirst quenching". Traditional Chinese medicine has a long history of research on this disease, and has a rich theoretical system for its treatment. The traditional Chinese medicine concept of "nip in the bone" and "treatment based on syndrome differentiation" is also in line with the management requirements of modern medicine for diabetes, hypertension and other chronic diseases. "Never cure disease" in the Canon of the yellow emperor, namely not disease prevention first, both heyman and defense, cannot cure disease in our hospital in recent years the introduction of the concept of elderly diabetes health management work, through the improvement of health management and adjustment, promote disease control effect in elderly patients with diabetes, which reduces the quality of life of patients with diabetes, produces adverse effect on safety of life and so on. It is necessary to make a health management plan based on syndrome differentiation and the actual situation of patients, and carry out health management from many aspects. This study combined with the recent data of some elderly patients with diabetes in our hospital to analyze the specific measures and value of disease health management guided by TCM preventive health management.

## **2. Data and Methods**

### **2.1. General Information:**

A total of 120 elderly patients with diabetes admitted to our hospital from May 2019 to June 2021 were included, and the inclusion criteria were as follows: meeting the diagnostic criteria for type 2 diabetes [4]; Elderly cases; The relevant matching data of this study are complete; Actively cooperate with researchers; Long term resident in the area. Exclusion criteria: abnormal mental condition, mental state; Complicated with serious organic diseases such as coronary heart disease, stroke, etc. People with abnormal motor function or unable to take care of themselves; Patients with tumors; Accompanied by infectious or infectious diseases. The patients were randomly divided into the study group and the control group (n=60) by double-blind random method. There was no significant difference in the general data between the two groups ( $P > 0.05$ ).

### **2.2. Methods**

The control group, routine treatment and management of diabetes were carried out. The attending physician made medication prescription and selected hypoglycemic drugs or insulin administration according to the patient's condition. Nursing staff should carry out medication guidance in combination with medication plan, including medication dosage, method, frequency, etc. Nursing staff of patients receiving insulin medication need to guide patients and their family members on insulin injection method.

Patients with diabetes mellitus should be informed of daily dietary precautions, patient answers to the existing problems of patients, and oral reminders of regular follow-up and discomfort.

#### **2.2.1. The experimental group**

On the basis of the control group, health management guided by the concept of middle treatment and no disease was carried out as follows:

(1) Health management team formation: By the head nurse's role as a leading role, choose experienced general service staff and community medical institutions of the nursing team, guided by the clinical doctors with rich work experience teacher, group leader to arrange team members to accept treatment is not sick in the concept, technology, chronic care, Chinese medicine nursing communication aspects of professional training, training is completed through examination for nursing work.

(2) Cognitive intervention: Cure for diabetes disease patients in such aspects as concept, TCM nursing cognitive intervention intervention, cognitive interventions including oral interpretation, video playback in a variety of ways, such as health lecture, health, enhance cure without disease of TCM nursing concept and TCM nursing cognition, improve the relevant nursing service demand rate, to ensure the progress of the follow-up care.

(3) Individual assessment and nursing plan formulation: Nurses comprehensively assess the patient's specific situation, economic status, overall health status, type of medical insurance, family support, etc., clarify the patient's individual situation and overall needs, formulate the corresponding nursing plan through group meetings, and adjust the nursing plan under the guidance of traditional Chinese medicine and general practitioners.

(4) Nursing service development: Primary hospitals and community medical institutions jointly provide patients with a variety of nursing services, including medication guidance, daily life recuperation, emotional intervention, diet management, activity guidance, health education, etc.

According to the specific needs of patients, it assists TCM doctors to carry out TCM characteristic therapeutic intervention, such as TCM acupuncture, acupoint pressing, TCM massage, auricular acupoint pressing, acupoint injection, etc. According to the characteristics of the nursing object, select targeted nursing services, give full play to the characteristics of TCM syndrome differentiation, holistic treatment, and different treatment for the same disease.

(5) Personal information file construction: Establish electronic information files for each elderly diabetic patient, record patient's case data, examination report, diagnosis, treatment and nursing plan in detail, so that medical institutions and community medical institutions can know the patient's personal situation at any time, and provide comprehensive and comprehensive professional services.

## 2.3. To observe

### 2.3.1. Assessment of glycemic control

In front of the management, management after two stages respectively to collect all the cases of peripheral venous blood (acquisition time for the morning fasting state, 2 h after breakfast or lunch, each time all collected 2 ml), to collect blood samples immediately into clinical laboratory, by clinical laboratory professional inspection physician to determine the glycemic index, including fasting blood glucose, 2 h postprandial blood glucose and glycosylated hemoglobin, etc.

### 2.3.2. Self-management behavior assessment of diabetic patients

The SDSCA (Diabetes Self-Care Activities Measure) [5] was used to evaluate the self-management behavior of each patient before and after management. The scale included six dimensions, including diet, blood glucose monitoring, exercise management, medication management, foot care and smoking, with a total of 12 items. Each item was scored from 0 to 7, among which smoking was negative and the other five dimensions were positive. The score was positively correlated with self-management behavior.

## 2.4. Statistical methods

SPSS23.0 statistical software was used for processing, and measurement data were expressed as ( $\bar{x} \pm s$ ), T-test was used for comparison, and count data were expressed as percentages.  $\chi^2$  test was used for comparison,  $P < 0.05$  was considered statistically significant.

## 3. Results

### 3.1. Comparison of blood glucose control effect between two groups

Before management, there was no significant difference in fasting blood glucose, 2h postprandial blood glucose and glycosylated hemoglobin between the two groups ( $P > 0.05$ ). Twelve prognoses were managed between the two groups. Fasting blood glucose, 2h postprandial blood glucose and glycosylated hemoglobin in the experimental group were lower than those in the control group, and the differences were statistically significant ( $P < 0.05$ ). The levels of fasting blood glucose, 2h postprandial blood glucose and glycosylated hemoglobin in the control group showed no significant differences compared with those before management ( $P > 0.05$ ), as shown in Table 1.

**Table 1. Comparison of blood glucose control between the two groups ( $\bar{x} \pm s$ )**

group	Fasting plasma glucose (mmol/L)		2h postprandial blood glucose (mmol/L)		Glycosylated hemoglobin (%)	
	Management before	After 12 months of administration	Management before	After 12 months of administration	Management before	After 12 months of administration
The experimental group/60	8.73±1.90	6.29±1.57*	12.45±2.37	9.67±1.22*	9.78±1.00	7.60±0.80*
The control group/60	8.55±1.85	8.28±1.95	12.61±2.40	11.99±2.51	9.71±0.97	9.50±0.95
t	0.526	6.157	0.367	6.439	0.389	11.850
P	0.600		0.714		0.698	<0.001

Note: Compared with before administration, \*  $P < 0.05$

### 3.2. Comparison of self-management behavior scores between two groups of diabetic patients

There was no significant difference in the SDSCA score between the two groups before management ( $P > 0.05$ ). After 12 months of management, the total SDSCA score of the experimental group increased, and the differences were statistically significant compared with those before management and the control group ( $P < 0.05$ ). The SDSCA score of the control group did not change significantly, as shown in Table 2.

**Table 2. Comparison of SDSCA score between two groups ( $\bar{x} \pm s$ , points)**

group	Management before	After 12 months of administration	t	P
The experimental group/60	37.28±5.71	72.39±4.17	38.646	<0.001
The control group/60	38.12±5.76	39.22±6.23	1.004	0.317
t	0.802	34.273		
P	0.424	<0.001		

## 4. Discussion

Diabetes, also known as traditional Chinese medicine diabetes, is a chronic surrogate disease related to the abnormal physiological function of insulin. The most characteristic of patients with this disease is the rise of blood glucose level, and long-term hyperglycemia will cause varying degrees of impact on the kidney, heart, brain and other important organs of the human body. Leading to a variety of diabetic complications, the patient's health status and quality of life has a great impact. Under the background of the gradual transformation of the disease spectrum, the incidence of diabetes is gradually increasing, and the current cases of diabetes are more than 400 million. Due to the influence of a large population base and accelerated urbanization in recent years, the existing cases of diabetes rank first in the world, accounting for a considerable proportion of the disease burden [6-7]. The pathogenesis of diabetes is complex and affected by environment, behavior pattern, diet structure and other factors. In recent years, the incidence of diabetes is relatively high. In the absence of specific treatment means, the treatment of diabetic patients in the medical field mainly focuses on insulin and hypoglycemic drug intervention, which can reduce and stabilize blood glucose level through dietary behavior intervention. It is of great significance to carry out health management for diabetic patients. "Pre-prevention, pre-prevention" is the core of TCM disease treatment concept, which is applied to elderly patients with diabetes, involving the control of diabetes progression, prevention of diabetes complications and other contents. This study analyzed the health management of cured elderly patients with diabetes. 12 cases showed the effect of management on prognosis. The patients in the experimental group, 2 h postprandial blood glucose and fasting blood glucose glycosylated hemoglobin were lower than those in the control group, and the SDSCA scale increased in the experimental group. There were statistically significant differences in the total score between the management group and the control group ( $P < 0.05$ ). The results showed that the health management service guided by the idea of TCM disease-free management could effectively promote the improvement of patients' blood glucose level and improve patients' self-management level.

## 5. Conclusion

From what has been discussed above, TCM preventive health management to guide the health management of elderly diabetes is of outstanding value in controlling blood glucose level and improving patients' self-management ability, which is worth carrying out.

## 6. Ethics

All patients in this study were clearly aware of the specific content of the study, and the signing of relevant informed consent was improved. The study was reviewed and approved by the ethics committee of the hospital.

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