

Study on the Influence of Traditional Chinese Medicine Health-Preserving Qigong (Baduanjin) on the Balance Function of Elderly People

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Abstract: Objective: To observe the influence of Traditional Chinese Medicine (TCM) health-preserving qigong (Baduanjin) exercise on the balance ability of elderly people. **Methods:** A total of 70 elderly patients in our hospital were selected as subjects, randomly divided into two groups by random sampling. One group received routine exercise guidance (35 cases, control group), and the remaining group carried out TCM health-preserving qigong (Baduanjin) exercise (35 cases, observation group). The balance function, quality of life, and daily activity ability of the two groups of elderly patients were compared. **Results:** After intervention, the balance ability and daily living ability of the observation group were higher than those of the control group ($P < 0.05$). The quality of life of the observation group after intervention was higher than that of the control group ($P < 0.05$). **Conclusion:** Guiding elderly patients to practice TCM health-preserving qigong (Baduanjin) can improve their balance ability, daily living ability, and quality of life, which is conducive to their recovery.

Keywords: Traditional Chinese Medicine Health-Preserving Qigong (Baduanjin); Elderly People; Balance Function

1. Introduction

With the increasing age of the elderly, various functions of the body tend to decline to varying degrees. Or under the influence of other diseases, the daily activity ability of patients will be affected to varying degrees, leading to a decrease in their balance ability, which is not conducive to the normal conduct of daily life^[1-2]. In the process of treating elderly patients, in order to help them recover quickly, it is necessary to take effective intervention measures in time to help restore their

damaged functions and improve their balance ability^[3-4]. TCM health-preserving qigong (Baduanjin) has a high utilization rate in functional exercise during the rehabilitation period of elderly patients. This study mainly analyzed the influence of TCM health-preserving qigong (Baduanjin) on the balance function of elderly people.

2. Materials and Methods

2.1 General Data

A total of 70 elderly patients in our hospital were selected as subjects, randomly divided into two groups by random sampling. One group received routine exercise guidance (35 cases, control group), and the remaining group carried out TCM health-preserving qigong (Baduanjin) exercise (35 cases, observation group). In the control group, there were 18 males and 17 females, aged 61-78 years, with an average age of (64.45 ± 1.35) years. The body mass index was 21-24 kg/m², with an average of (22.65 ± 1.15) kg/m². In the observation group, there were 19 males and 16 females, aged 63-80 years, with an average age of (65.45 ± 1.35) years. The body mass index was 21-24 kg/m², with an average of (22.75 ± 1.23) kg/m². There was no significant difference in the basic data between the two groups ($P > 0.05$).

2.2 Methods

The control group received routine rehabilitation management during the recovery process. Rehabilitation doctors comprehensively assessed various aspects of the patients, understood their recovery status, patiently explained the issues that need attention during the recovery period, and actively guided them to carry out various rehabilitation training, mainly including aerobic exercises such as walking, jogging, or brisk walking. The duration and amount of exercise per session

were managed according to the specific situation of the patients to avoid fatigue during exercise.

The observation group practiced TCM health-preserving qigong (Baduanjin) during the recovery period. Before the exercise, rehabilitation doctors demonstrated Baduanjin movements face-to-face to the patients and guided them to watch relevant video materials to ensure that they could accurately master each movement in Baduanjin exercise. Patients were instructed to practice Baduanjin every day, with each session lasting about 30 minutes, twice a day. They could adjust the amount of exercise reasonably according to their own specific conditions.

2.3 Observation Indicators

(1) Analysis of quality of life: The World Health Organization Quality of Life-Bref (WHOQOL-BREF) scale was used to evaluate the patients' quality of life. The scale subjectively evaluates patients in terms of physiology, psychology, environmental factors, and social relationships. Patients were guided to answer the corresponding questions in the scale according to their actual situation, and a higher score indicates a better quality of life.

(2) Analysis of balance ability and daily living

ability: The Berg Balance Scale was used to assess the patients' balance ability, with a score range of 0-56 points (higher scores indicating better balance ability). The Activity of Daily Living (ADL) scale was used to evaluate daily living ability, with a score range of 0-100 points (higher scores indicating better daily living ability).

2.4 Statistical Methods

The relevant data in the study were analyzed using SPSS 25.0. Measurement data such as balance ability, daily living ability, and WHOQOL-BREF scores were expressed as mean \pm standard deviation ($\bar{x} \pm s$), which conformed to the normal distribution and were tested by t-test. Enumeration data were expressed as percentages (%) and tested by chi-square test. P value <0.05 indicated a statistically significant difference.

3. Results

3.1 Analysis of Quality of Life

The quality of life of the observation group after nursing was higher than that of the control group, and the difference was statistically significant ($P < 0.05$), as shown in Table 1.

Table 1. Comparison of Quality of Life ($\bar{x} \pm s$)

Group	Number of Cases	Physiology		Environmental Factor		Social Relationship		Psychology	
		Before Nursing	After Nursing	Before Nursing	After Nursing	Before Nursing	After Nursing	Before Nursing	After Nursing
Observation	35	15.05 \pm 1.35	24.35 \pm 1.12	15.45 \pm 1.23	25.12 \pm 1.06	8.01 \pm 1.04	14.98 \pm 1.18	16.05 \pm 1.21	22.95 \pm 1.12
Control	35	15.15 \pm 1.25	21.23 \pm 1.35	15.35 \pm 1.12	22.05 \pm 1.12	8.02 \pm 1.12	11.23 \pm 1.12	16.11 \pm 1.12	20.22 \pm 1.22
t	-	0.315	13.136	0.357	14.509	0.043	14.516	0.279	9.927
P	-	0.723	<0.001	0.722	<0.001	0.966	<0.001	0.781	<0.001

3.2 Comparison of Balance Ability and Daily Living Ability

After treatment, the balance ability and daily living

ability of the observation group were higher than those of the control group ($P < 0.05$), as shown in Table 2.

Table 2. Comparison of Balance Ability and Daily Living Ability ($\bar{x} \pm s$)

Group	Number of Cases	Balance Ability		Daily Living Ability	
		Before Nursing	After Nursing	Before Nursing	After Nursing
Observation	35	22.35 \pm 2.35	41.45 \pm 1.98	67.45 \pm 3.45	85.45 \pm 2.34
Control	35	22.46 \pm 2.45	31.64 \pm 2.05	67.68 \pm 4.11	73.61 \pm 3.17
t	-	1.578	27.452	1.452	28.045
P	-	0.326	0.001	0.115	0.001

4. Discussion

Elderly patients have varying degrees of impairment in various body functions due to their advanced age, which directly affects their daily life

and is not conducive to recovery. In the process of routine rehabilitation management for patients, guiding them to carry out various aerobic training can help them recover. However, observations show that under the effect of routine rehabilitation

training, patients recover relatively slowly, which is not conducive to the recovery of their damaged balance function.

TCM health-preserving qigong (Baduanjin) has a high utilization rate in the rehabilitation treatment of elderly patients. Under the effect of this exercise, the damaged limb function and balance function of patients can be restored according to the principle of gradual progress. Continuous practice of Baduanjin can improve the patients' limb movement ability, help them quickly return to normal life, and enhance their daily activity ability^[5-6]. In this study, the observation group practiced TCM health-preserving qigong (Baduanjin) during the recovery period, and their quality of life, balance ability, and daily activity ability were significantly improved, indicating that this exercise program can help restore the damaged functions of patients and improve their balance ability.

In conclusion, carrying out TCM health-preserving qigong (Baduanjin) rehabilitation treatment in a timely manner during the recovery process of elderly patients is helpful to improve their balance ability and promote their recovery.

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