

Analysis of the Application Effect of Hospital-Community-Family Linkage Nursing in Elderly Patients with Hypertension

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Abstract: *Objective:* To observe the effect of traditional Chinese medicine hospital-community-family linkage nursing for elderly patients with hypertension. *Methods:* 76 elderly patients with hypertension in our hospital (from March 2024 to October 2025) were selected and randomly divided into an observation group and a control group. The former was hospital-community-family linkage care, and the latter was routine care, 38 cases in each group. *Results:* Compared with the control group, the observation group had lower blood pressure levels, higher self-care ability scores, higher compliance scores, and higher quality of life scores, $P < 0.05$. *Conclusion:* The application of hospital-community-family linked care in elderly patients with hypertension can reduce patients' blood pressure levels, improve self-care ability, treatment compliance and quality of life, and is worth learning from.

Keywords: hospital-community-family linked care; elderly; hypertension

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1. Introduction

Hypertension is a chronic cardiovascular disease. In recent years, due to the increase in the elderly population, the number of elderly patients with hypertension in my country has also been increasing. Analysis shows that the course of the disease is long, and the patient's blood pressure is prone to fluctuations repeatedly. If the control effect is not good for a long time, it will lead to serious complications, such as stroke, coronary heart disease, etc., which will have a great impact on the physical and mental health of the elderly^[1]. For patients who are older, they often have problems such as memory loss, poor medication consciousness, and insufficient health knowledge. Hypertension is a disease that requires long-term management. Therefore, the care model must be optimized, taking into account the disease and patient characteristics^[2]. Single in-hospital care cannot intervene in the patient's condition for a long time, and routine care is mainly based on basic in-hospital intervention and simple education, which cannot guarantee the continuity of nursing services, resulting in poor blood pressure control after discharge^[3]. Hospital-community-family linked care has attracted further attention. Under this nursing model, a continuous management system can be established for patients, avoiding space restrictions on nursing services, and helping patients to maintain stable blood pressure control.

2. Materials and methods

2.1. General information

From March 2024 to October 2025, 76 elderly patients with hypertension in our hospital were selected and divided into 2 groups of 38 patients each. There were 20 males and 18 females in the control group, aged 62 to 79 (71.48 ± 2.74) years old, and 21 males and 17 females in the observation group, aged 61 to 78 (71.52 ± 2.66) years old. Comparison of general data, $P > 0.05$.

Inclusion criteria: all met the diagnostic criteria for hypertension^[4]; age ≥ 60 years old; complete clinical data.

Exclusion criteria: secondary hypertension; mental illness; severe complications such as cerebral hemorrhage.

2.2. Method

Control group: patients routinely used antihypertensive drugs, explained medication precautions, distributed disease and health brochures, regularly monitored blood pressure, and conducted outpatient follow-up visits, etc.

Observation group: ① When the patient is in the hospital, a comprehensive health assessment will be conducted on the patient, and his or her basic information will be compiled, mainly including basic personal information, age, etc., and a detailed record of past chronic medical history will be made, and the physical condition will be understood at the same time. Nursing staff take the initiative to understand patients' daily eating patterns, analyze daily activity habits, and understand changes in emotions. During this process, combined with the patient's individual physical characteristics and disease differences, they provide corresponding care plans, adjust the patient's diet, carry out psychological intervention, supervise the patient's standardized medication, and dynamically monitor changes in blood pressure. At the same time, we can grasp the effects of drugs and optimize care content in a timely manner based on patient examination results. When they were discharged from the hospital, they were given systematic health guidance to explain the importance of complication prevention, and were instructed to do a good job of home blood pressure testing and pay attention to their daily diet and other aspects. Improve patients' personal health files and transfer patient information with the community to ensure continuity of care services. ② The community health service center continuously updates the patient's health file, and the community nursing staff follows up the patient through a variety of methods, such as online return visits, door-to-door follow-up, etc., to continuously monitor the patient's blood pressure control, understand the patient's lifestyle improvement, master medication compliance, and provide timely guidance and correction for the patient's bad living habits. The community regularly organizes and carries out hypertension health education activities, which can provide detailed and comprehensive explanations on hypertension prevention and control knowledge and patient home management skills. During this period, family members can be invited to participate to further enhance their understanding with patients. Establish good communication between the community and the hospital. The community will provide timely feedback to the hospital on the fluctuations in the patient's condition. If the patient's condition is unstable and his blood pressure is poorly controlled, he or she needs timely assistance for follow-up consultation. ③ In the management of patients' diseases, nursing staff need to tell family members to actively participate in it, and carry out professional education so that they can have a better understanding of hypertension knowledge and master basic nursing skills. They should accompany patients in daily life, supervise patients' daily behaviors, such as diet, medication, etc., and provide emotional and life support. During the patient's blood pressure testing process, family members need to assist, remind the patient to take medication on time and in the right amount, and urge the patient to exercise reasonably. During this period, we pay close attention to the changes in the patient's mental state, so that the negative emotions caused by the long-term disease can be alleviated, the patient can maintain psychological relaxation, and improve cooperation with blood pressure control. ④ Establish a three-party information sharing channel, including hospitals, communities and families. In this process, the nursing implementation specifications and effect evaluation standards are unified, regular three-party communication is carried out, the patient care situation is further sorted out, and existing nursing problems and difficulties are found and solved in a timely manner.

2.3. Observation indicators

(1) Blood pressure level; (2) Self-care ability: Self-Care Ability Assessment Scale (ESCA), the higher the score, the better; (3) Treatment compliance: complete compliance, partial compliance, non-compliance; (4) Quality of life: Brief Health Scale (SF-36).

2.4. Statistical methods

SPSS 26.0 software, measurement data and counting data are represented by ($\bar{x} \pm s$), n,% respectively. Carry out t and χ^2 test, $P < 0.05$, the difference is statistically significant.

3. Results

3.1. Blood pressure level

After intervention, the observation group was lower than the control group, $P < 0.05$, Table 1.

Table 1 Blood pressure level ($\bar{x} \pm s$, mmHg)

Group	Systolic blood pressure		Diastolic blood pressure	
	Before intervention	After intervention	Before intervention	After intervention
Control group (n=38)	156.37±8.72	138.57±6.57	93.32±5.47	86.47±4.22
Observation group (n=38)	157.48±7.68	125.37±6.60	93.47±5.46	80.37±4.65
<i>t</i>	0.589	8.738	0.120	5.988
<i>P</i>	0.558	0.000	0.905	0.000

3.2. Self-care ability

After intervention, the observation group was higher than the control group, $P < 0.05$, Table 2.

Table 2. Self-care ability ($\bar{x} \pm s$, points)

Group	Self-responsibility		Self-care skills		Self-concept		Health knowledge level	
	Before intervention	After intervention	Before intervention	After intervention	Before intervention	After intervention	Before intervention	After intervention
Control group (n=38)	16.63±1.84	20.62±1.46	25.52±0.47	31.52±0.44	22.74±1.58	25.63±1.48	32.22±1.74	36.34±1.50
Observation group (n=38)	16.58±1.62	25.58±1.62	25.56±0.62	42.54±1.62	22.57±1.73	28.48±0.62	32.52±1.66	44.62±1.52
<i>t</i>	0.126	14.020	0.317	40.467	0.447	10.949	0.769	23.901
<i>P</i>	0.900	0.000	0.752	0.000	0.656	0.000	0.444	0.000

3.3. Treatment compliance

The observation group was higher than the control group, $P < 0.05$, Table 3.

Table 3. Treatment compliance (n%)

Group	Complete compliance	Partial compliance	Noncompliance	Always comply
Control group (n=38)	14 (36.84)	17 (44.74)	7 (18.42)	31 (181.58)
Observation group (n=38)	19 (50.00)	18 (47.37)	1 (2.63)	37 (197.37)
χ^2	-	-	-	5.029
P	-	-	-	0.025

3.4. Quality of life

The observation group was higher than the control group, $P < 0.05$, Table 4.

Table 4. Quality of life ($\bar{x} \pm s$, points)

Group	Energy	Emotional function	Somatic pain	Social function	General health	Physiological function	Mental health	Physiological functions
Control group (n=38)	75.37±2.52	73.64±2.57	74.62±3.64	73.74±2.57	74.82±2.74	73.23±2.61	74.72±2.58	74.75±2.72
Observation group (n=38)	79.74±3.38	78.63±2.95	78.59±3.63	78.72±2.83	79.57±2.62	77.84±2.37	78.89±2.71	77.90±2.65
t	6.390	7.878	4.761	8.030	7.724	8.061	6.870	5.113
P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

4. Discussions

For elderly patients with hypertension, drug treatment alone cannot exert a significant pressure control effect in the process of disease control. It is believed that the disease will also be affected by various adverse factors in patients' daily life. In this case, higher requirements are placed on the patients themselves. Many elderly patients lack a systematic concept of chronic disease management and are prone to various adverse behaviors, such as increasing or decreasing medications without authorization or discontinuing medications, irregular diet, etc., which further worsens the condition under the influence of various adverse factors^[5]. Moreover, elderly patients have special characteristics and must undergo continuous health supervision and receive professional guidance. At the same time, they should pay attention to psychological care, avoid risk factors through standardized and uninterrupted nursing services, improve blood pressure control effects, prevent disease progression, and also play an important role in improving long-term prognosis^[6]. Hospital-community-family linked nursing is an effective nursing model that takes the family as the foundation, the community as the link, and the hospital as the core, closely linking the above links. The hospital mainly diagnoses, evaluates and formulates personalized care plans for patients, and provides health guidance before discharge. The community mainly carries out follow-up management of patients, conducts health education and follow-up, and provides feedback on the patient's actual condition to the hospital. Families mainly provide patients with daily care. The three parties have established an information exchange mechanism to ensure the seamless connection of nursing services from the hospital to the home.

In the results of this study, the blood pressure level of the observation group was lower than that of the control group ($P < 0.05$). Hospital-community-family linked care can enable patients to be actively controlled in different places, provide continuous medication guidance, supervise and adjust lifestyles, and actively carry out blood pressure monitoring. It can intervene in patients' abnormal conditions in a timely manner, avoid the influence of risk factors, promote the full effect of drugs, and achieve better blood pressure control effects^[7]. The self-care ability score of the observation group was higher than that of the control group ($P < 0.05$). The hospital-community-family linkage nursing model provides in-

hospital guidance to patients, the community further popularizes knowledge about hypertension, and families focus on the implementation of specific nursing measures. Through the above aspects, patients can improve their own cognition and master certain self-care skills, which is conducive to improving their own awareness of active disease management and thus improving their self-care ability^[8]. The compliance score of the observation group was higher than that of the control group ($P < 0.05$). Under hospital-community-family linkage care, through community follow-up and daily supervision by family members, patients can be reminded to take medication on time from different levels. In this process, cooperation with health education can help patients improve their understanding of the importance of TCM treatment, maintain a positive attitude towards the disease treatment process, and reduce negative resistance behaviors^[9]. In terms of quality of life, the observation group was higher than the control group ($P < 0.05$). The linked nursing model can not only effectively regulate the patient's blood pressure and improve the existing discomfort symptoms, but also focus on psychological intervention and social support, guide family members to accompany the patient, and provide patients with comprehensive community care. Through various aspects, the patient's negative emotions can be alleviated, social activities can be actively carried out, daily activities can be improved, and the patient's quality of life can be improved^[10].

Therefore, hospital-community-family linked care for elderly patients with hypertension can reduce blood pressure levels, promote self-care ability, compliance and improve quality of life, and has promotion value.

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Disclosure statement

The author declares no conflict of interest.

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