Application value of family participation model in rehabilitation nursing of patients with ischemic encephalopathy

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**Abstract**

**Objective:** To analyze the effect of family participation model in community rehabilitation of patients with ischemic stroke.

**Methods:** A total of 90 patients were randomly divided into two groups: intervention group (n = 45) and control group (n = 45). The intervention group adopted special family participation mode of traditional Chinese medicine rehabilitation nursing intervention, while the control group adopted routine rehabilitation nursing intervention. After 8 months, the difference of rehabilitation effect between the two groups was evaluated.

**Results:** After 8 months of intervention, Barthel Index and Fegl meyer score were all improved, and the improvement of the intervention group was higher than that of the control group, the difference was statistically significant (P < 0.05).

**Conclusion:** The family participation model of traditional Chinese medicine rehabilitation nursing for the rehabilitation of ischemic stroke patients in the community has a significant effect, which is worth promoting.

**Keywords**

Individualized rehabilitation intervention; Ischemic stroke; Effect evaluation

Stroke is a common clinical disease, the incidence of middle-aged and elderly patients is high, in which ischemic stroke is common, most patients can leave different degrees of neurological dysfunction, resulting in heavy economic and social burden [1]. Early rehabilitation intervention can effectively reduce the disability rate, improve the prognosis of patients, and improve the quality of life of patients [2]. Research shows that diet, daily life, emotion, traditional Chinese medicine medication and traditional Chinese medicine nursing technology are the main needs of community residents' rehabilitation nursing [3]. It is significant to carry out systematic and effective rehabilitation nursing for patients in the recovery period earlier in order to promote the prognosis of patients, reduce the disability rate and reduce the heart disease after stroke.

1. Objects and methods

1.1 Research object

From August 2018 to April 2019, 90 patients with ischemic stroke were diagnosed in our hospital, all of whom were
over 60 years old. 90 patients were followed up for improvement after admission and discharge, with an average age of 
(67.3 ± 4.6) years. The average course of disease was (13.7 ± 4.1) months. Randomly divided into intervention group (n = 
45) and control group (n = 45). There was no significant difference between the two groups (P > 0.05).

1.2 Inclusion and exclusion criteria
Inclusion criteria: willing to participate in the study with informed consent, able to cooperate with the completion of 
the study, physical condition permitting, age > 60 years old, diagnosed as ischemic stroke patients, improved treatment, 
discharge follow-up; exclusion criteria: not able to participate in the study as required.

1.3 Research method
For 90 follow-up patients who meet the inclusion criteria, the rehabilitation doctors and nurses in our hospital are 
responsible for organizing the implementation. The medical staff in the intervention group formulate special intervention 
measures according to their personal conditions. During the whole process of implementation of the measures, the 
family members of the patients are mobilized to participate and give professional guidance; the control group adopts 
routine rehabilitation nursing measures. After 8 months of intervention, the two groups were evaluated.

1.4 Intervention measures
Before the implementation of the comprehensive assessment of the condition, the assessment includes the general 
situation of the patient, nutrition, muscle strength level, daily life ability, etc., according to which to develop 
rehabilitation nursing measures in line with the actual situation of the patient.

1.4.1 Intervention in control group
The routine muscle strength training in rehabilitation period needs professional guidance and gait posture. Including 
walking training: preparation before walking: support the front and back swing of the affected leg in standing position, 
step and bend the knee, practice the alternating front and back steps of the legs and the transfer of the center of gravity, 
support walking or walking in parallel bars to improve the gait training, focus on correcting the circle walking, step up 
and down training, and start the "healthy leg first up, sick leg first down", let it be natural. Movement training: eating, 
personal hygiene, dressing, bathing, writing, craft treatment (such as knitting, embroidery, painting, ceramics, rubber 
clay sculpture, etc.), training two hands to cooperate in operation (such as typing, knotting, building blocks, screwing, 
picking up small items, playing the piano, etc.), training the fine movement ability of the hand; application of self-care 
AIDS; housework, outdoor activities. Rehabilitation measures of traditional Chinese medicine: acupuncture, massage, 
physical therapy, etc. are performed by professional doctors and nurses.

1.4.2 Intervention measures of intervention group
In addition to the control group measures, family members are encouraged to participate in the mode, and family 
members are encouraged to contact with patients closely. Some traditional Chinese medicine rehabilitation measures, 
such as massage, Aizhi and physical therapy, can be taken by professionals to guide family members to learn, undertake 
follow-up rehabilitation care, and inform patients' families, friends and colleagues to communicate with patients more 
in speech, so as to create a good language environment for patients, so that they can listen more and more Speaking, 
so that the ability of pronunciation and speaking can be restored as soon as possible. Advocating emotional nursing of 
family members: we should encourage family members to communicate with patients, establish a good family support 
environment, encourage patients, understand patients' inner state, encourage them to tell, and eliminate depression.

1.5 Evaluating indicator
Barthel Index Evaluation: To evaluate the ability of daily life activities of patients with ischemic stroke. This scale 
is divided into 10 items, with a total of 100 points. The higher the score, the better the daily life activities [4]. Fegl 
mevyer score: the evaluation of limb motor function, a total of 100 points, the higher the score, the better the limb motor 
function [5].

1.6 Statistical methods
All the data were analyzed by SPSS18.0, and the differences between groups were compared by x² and t-test, P < 0.05, 
indicating that there was statistical significance.
2. Results
There were 45 patients in the intervention group, 3 in the lost visit group, the lost visit rate was 6.7%, 45 in the control group, 2 in the lost visit group, the lost visit rate was 4.4%. The causes of the lost visit in the two groups were serious complications and could not participate in the study. After 8 months of intervention, the Barthel Index and fegl mevyer scores of the intervention group and the control group are compared as shown in Table 1. After intervention, Barthel Index and fegl mevyer score were all improved, and the difference was statistically significant (P < 0.05).

<table>
<thead>
<tr>
<th>Group</th>
<th>Time</th>
<th>Barthel index</th>
<th>Fegl-Mevyer score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention group (n = 42)</td>
<td>Before intervention</td>
<td>38.5 ± 8.5</td>
<td>29.7 ± 7.3</td>
</tr>
<tr>
<td></td>
<td>After intervention</td>
<td>58.4 ± 9.7</td>
<td>43.7 ± 11.4</td>
</tr>
<tr>
<td>Control group (n = 43)</td>
<td>Before intervention</td>
<td>42.2 ± 11.5</td>
<td>32.5 ± 9.7</td>
</tr>
<tr>
<td></td>
<td>After intervention</td>
<td>69.7 ± 13.7</td>
<td>55.4 ± 8.6</td>
</tr>
</tbody>
</table>

3. Discussion
Stroke is a common cerebrovascular accident. The main pathological feature of stroke is that the acute cerebral circulation disorder leads to the loss of local nerve function. It has the characteristics of acute onset and high disability rate, which seriously threatens the physical and mental health of the middle-aged and old people. The incidence of stroke in China is as high as 212.6/100000, and about 2.76 million new stroke patients every year [6]. With the continuous development of medical technology, the rescue success rate of stroke is gradually increasing, but there are still many patients with different degrees of disability, there will be a decline in the quality of life and psychological burden of stroke patients with dysfunction after returning to their families. Therefore, stroke patients need long-term and continuous rehabilitation training and psychotherapy and other comprehensive interventions.

Continuous nursing is a patient-centered approach to realize the smooth transition between different health care sites or different levels of health care institutions, maintain the continuity of nursing services, and reduce the probability of health deterioration of high-risk patients. As a new type of nursing mode, continuous nursing can effectively improve the quality of life and medical service of patients, which has been widely used in recent years. High quality and continuous nursing can effectively promote the rehabilitation of limb function of patients with cerebral hemorrhage after operation, and improve the compliance of patients with orders outside the hospital. Compared with the traditional nursing mode, continuous nursing can reduce the incidence of anxiety, improve self-efficacy and improve the quality of life of patients with stroke.

With the development of continuous nursing research, many scholars have found that family members' participation is of great significance in the process of implementation, especially in China, where medical resources are extremely scarce, family members of patients are often the executors and supervisors of daily care work. The active participation of family members will not only make continuous nursing smoothly, but also ensure its ideal effect. Relevant medical research shows that with the extension of discharge time, the activities of daily life and health promoting life style of the two groups of patients have improved, but in terms of the time cut-off point of discharge 12 weeks, the improvement degree of the activities of daily life and health promoting life style of the patients who have implemented the continuous nursing is significantly better than that of the conventional nursing, suggesting that the continuous nursing intervention is helpful to improve In addition, continuous nursing intervention can significantly reduce the outpatient treatment rate within 12 weeks after discharge, but it has no significant effect on the rate of re hospitalization and emergency treatment. The reason may be that continuous nursing can correct bad living habits and prevent health deterioration events It can be seen that continuous nursing can promote the rational use of health service resources.

Community rehabilitation is a continuation to adapt to the transformation of medical model and implement hospital medical service. In community nursing, nurses are not only caregivers of patients, but also health educators, consultants and managers of patients and families. Effective family intervention can improve the patients' physiological function, psychological state, social function and common sense of medical care, so as to improve the patients' quality of life [7].

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Traditional Chinese medicine emphasizes the close relationship between emotional factors and stroke, just as "the theory of Su Wen, Qi Tong Tian" says: "when people are angry, they will lose their Qi, while when blood is on top, they will faint." [8]. The change of Depression Psychology and its external behavior makes the enthusiasm of treatment and rehabilitation of stroke patients decrease, which has an important influence on the improvement of neurological deficit and the ability of daily life, thus directly affects the quality of life and functional rehabilitation of stroke patients. Therefore, emotional nursing is the main nursing measure for stroke patients in recovery period. We know from the survey that most of the community residents don't know about the rehabilitation care of traditional Chinese medicine, but they think that the rehabilitation measures of traditional Chinese medicine are effective in treating diseases, and they are willing to learn these methods and hope to use them to treat diseases. The results showed that after 8 months of intervention, Barthel Index and fegl mevyer score were all improved, the improvement of intervention group was higher than that of control group, the difference was statistically significant (P < 0.05) The enthusiasm of patients and their families to enhance emotional communication, is conducive to rehabilitation.

To sum up, the family participation model of Chinese medicine rehabilitation nursing for the community rehabilitation of patients with ischemic stroke has a significant effect, which is worthy of application and promotion.

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**References**


