

The Effect of Telephone Follow-Up on the Rehabilitation Effect of Stroke Patients in Convalescent Period

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ABSTRACT. *Objective: to analyze the positive effect of telephone follow-up on the convalescent stroke patients. Methods: the subjects of this study were 180 stroke patients who received treatment and care in our hospital from January 2019 to December 2019. All patients were divided into observation group and control group according to the number random table method, with 90 cases in each group. Patients in the control group received routine health education and rehabilitation guidance before discharge, and patients in the observation group continued to follow up by telephone on this basis. 1 week after discharge, patients in the observation group received targeted follow-up and health guidance, including medication, rehabilitation exercise, and mental health management. Then the NIHSS score and family function score of the two groups were compared to determine the actual role of telephone follow-up. Results: the results of this study showed that the NIHSS scores of patients in the observation group and the control group were close to each other before the telephone follow-up, but the scores of patients in the observation group were significantly better than those in the control group in the review at 3 months after the telephone follow-up, indicating that the neurological function of patients in the observation group recovered well. The difference of data results was significant ($P<0.05$), and the results were statistically significant. In terms of family function score, the scores of the two groups were close before the telephone follow-up, but the family function score of the observation group at 3 months after the follow-up was significantly higher than that of the control group, indicating that the patients in the observation group received a lot of support in growth degree, intimacy degree, and emotion degree. The difference of data results was significant ($P<0.05$), and the results were statistically significant. Conclusion: telephone follow-up can effectively promote the rehabilitation process of stroke patients, both compliance and quality of life can be significantly improved, it can be used as a routine nursing measures for such patients in the future.*

KEYWORDS: *Telephone follow-up, Convalescence, Stroke, Effect of rehabilitation*

1. Introduction

Generally, the recovery period of stroke patients is relatively long. After the

patients receive emergency treatment and care in the hospital, many patients will choose to carry out rehabilitation treatment at home. For patients, the quality of life at home will be affected by a number of factors. For example, family support level, social support, self-care ability, patient health education, etc. The fundamental purpose of stroke rehabilitation is to improve the motor function of patients, prevent the occurrence of complications, and ensure the ability of daily living activities of patients, so that patients can return to their families and society earlier. However, such patients did not fully recover when they were discharged from the hospital, and were often accompanied by motor dysfunction or cognitive impairment of different degrees. Moreover, the patients lacked basic rehabilitation knowledge and often missed the favorable opportunity for recovery. Therefore, when patients are discharged from the hospital, telephone follow-up is given for long-term care management, which is conducive to the improvement of patients' adverse rehabilitation process, which is also the main entry point of this study. The results are reported below.

2. Materials and Methods

The general information. The subjects of this study were 180 stroke patients who received treatment and care in our hospital from January 2019 to December 2019. All patients were divided into observation group and control group according to the number random table method, with 90 cases in each group. In the observation group, there were 55 males and 35 females, aged 44-79 years, with an average age of (61.1 ± 1.5) years. There were 53 males and 37 females in the control group, aged 43-75 years, with an average age of (60.8 ± 1.4) years.

Inclusion criteria: all patients met the clinical diagnostic criteria for cerebral apoplexy in the fourth national conference on cerebrovascular diseases in 1996, and were finally diagnosed after receiving CT or MRI imaging examination. The patient had no significant disturbance of consciousness. Before the onset of a general ability to live independently.

Exclusion criteria: patients with severe cognitive impairment, mental disorders; Previous history of mental illness; Patients with medical diseases.

This study was conducted after the review and approval of the hospital ethics committee. All the patients' family members were aware of the content of this study and voluntarily signed the informed consent. There was no significant data difference in the comparison of general data such as gender, age and pathological characteristics ($P > 0.05$), and the data were comparable.

3. Results

Neurological deficit. The results of this study showed that the NIHSS scores of the patients in the observation group and the control group were close to each other before the telephone follow-up, but the scores of the observation group were significantly better than those of the control group in the review **at 3 months** after

the telephone follow-up, indicating that the neurological function of the patients in the observation group recovered well. The difference of data results was significant ($P < 0.05$), and the results were statistically significant. The detailed data are shown in table 1 below.

Table 1 Comparison of Nihss Score Data between the Two Groups (n, Scores)

Group	The number of cases	Before telephone follow-up	3 months after telephone follow-up
Observation group	90	7.95±0.35	5.23±0.37
Control group	90	7.89±0.35	7.11±0.42
t	-	0.669	3.541
P	-	2.359	< 0.05

Family functioning. In terms of family function score, the scores of the two groups were close before the telephone follow-up, but the family function score of the observation group at 3 months after the follow-up was significantly higher than that of the control group, indicating that the patients in the observation group received a lot of support in growth degree, intimacy degree, and emotion degree. The difference of data results was significant ($P < 0.05$), and the results were statistically significant. The detailed data are shown in table 2 below.

Table 2 Comparison of Apgar Score Data between the Two Groups (n, Scores)

Group	The number of cases	Before telephone follow-up	3 months after telephone follow-up
Observation group	90	7.95±0.35	5.23±0.37
Control group	90	7.89±0.35	7.11±0.42
t	-	0.669	3.541
P	-	2.359	< 0.05

4. Discuss

From the data results of this study, the patients in the observation group were significantly better than the control group in both neurological deficit score and family function score, which proved that the patients in the observation group had a good neurological recovery and received a lot of support from their families. This indicates that telephone follow-up plays a key role in guiding and supervising the rehabilitation and nursing of patients [1]. There is a strong association between family support and health, and most studies agree that good social support has a clear role in supporting patients' recovery. In addition, the scores of patients in the

observation group were better than those in the control group. Generally speaking, such patients' respect for medical measures and compliance with health education measures together constitute their self-education behaviors [2]. Telephone follow-up provided targeted health education and behavioral guidance to the patients, which prevented the interference of risk factors at the root. For example, patients in the observation group can carry out rehabilitation training according to the telephone follow-up, correct bad living habits or eating habits according to the follow-up requirements, and understand the importance of regular follow-up [3]. Patients' family members can also urge patients to take medicine on time, control blood pressure, take effective home nursing measures, and reasonably extend the basic care in the hospital. Telephone follow-up work provides support and guidance for patients' daily life design, which is conducive to patients' mastering of self-care knowledge and related skills, and enabling them to complete daily activities as independently as possible [4]. In terms of family functioning, good social relationships and family function will ensure the continuation of health behavior patients, observation group of patients to further master the relevant knowledge and life skills training method of disease, family members will also be actively involved in the patient's rehabilitation process, promote the harmonious communication between family members, the stability of the family support system. For example, many patients' families get in touch with doctors and nurses through WeChat to discuss the patient's rehabilitation plan, which plays an important role in the recovery of patients [5].

In summary, telephone follow-up can effectively promote the rehabilitation process of stroke patients, and both compliance and quality of life can be significantly improved, which can be used as routine nursing measures for such patients in the future.

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