Application effect of self-efficacy nursing intervention on patients in the convalescent stage from ischemic cerebral infarction.

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Abstract

Objective: To explore and analyse the application effect of self-efficacy nursing intervention on patients who are convalescing from ischemic cerebral infarction.

Methods: A total of 80 subjects with ischemic cerebral infarction were recruited from patients who were enrolled at our hospital from January 2015 to January 2016. The recruited patients were randomly divided into the observation and control groups. Each group comprised 40 patients. Patients in the control group received routine nursing measures, whereas patients in the observation group received training for self-efficacy nursing intervention, which is based on routine nursing measures. The clinical efficacy, nursing satisfaction degree, nursing compliance rate, and nursing comfort of the two groups were compared after nursing intervention.

Results: After nursing intervention, the total clinical efficacy rate of patients in the observation group was 95%, whereas that of patients in the control group was 67.5%. The nursing satisfaction degree, nursing compliance rate, and nursing comfort of patients in the observation group were significantly (P<0.05) higher than those of patients in the control group. After nursing intervention, the blood lipid concentration of patients in the observation group significantly decreased (all P<0.05) compared with that of patients in the control group. Thus, self-efficacy nursing intervention positively and significantly alleviated the high blood lipid concentrations of patients.

Conclusion: Self-efficacy nursing intervention, which is based on routine nursing intervention, significantly improves the clinical efficacy, nursing satisfaction degree, nursing compliance rate, and nursing comfort of patients with ischemic cerebral infarction. Therefore, self-efficacy nursing intervention is suitable for clinical application to patients who are convalescing from ischemic cerebral infarction.

Introduction

Cerebral infarction, one of the most common cardiovascular and cerebrovascular diseases, has high incidence among the elderly. The number of patients with ischemic cerebral infarction increases by one million annually; most patients eventually lose their ability to work and self-sufficiency [1-3]. Given that the disease causes severe disability, the patient's nursing during convalescence is critical. This research explores the application effect of self-efficacy nursing intervention, which is based on conventional nursing intervention, on patients who are convalescing from ischemic cerebral infarction.

Materials and Methods

General information

A total of 80 subjects with ischemic cerebral infarction were selected from patients who were enrolled in our hospital from January 2015 to January 2016. The recruited patients were randomly divided into the observation and control groups. Each group comprised 40 patients. Among the 40 patients in the observation group, 21 were male and 19 were female; the patients had an age range of 49 to 73 years old and an average age of 64.4 ± 2.9. Among the 40 patients in the control group, 20 were male and 20 were female; the patients had with an age range of 52 to 72 years old and an average age of 61.7 ± 2.6. Patients with severe infection, severe trauma, liver and kidney dysfunction, limb deformity, and severe psychosis were excluded from the present study. All patients voluntarily provided written informed consent and were approved by the

Ethics Committee. The two groups of patients had no significant differences in age, sex, and other general data.

Methods

Patients in the control group received routine nursing measures, such as medication guidance and hospital environmental care. In addition to routine nursing measures, patients in the observation group received self-efficacy nursing intervention, which included (1) health education: Patients and their families were given information on ischemic cerebral infarction. Patients and their families were also taught simple prevention and control measures for ischemic cerebral infarction, as well as options for cooperative treatment during convalescence. The one-on-one lecture mode was used for teaching. Powerful presentation techniques and video materials were also used for public teaching. When patients were introduced to and taught to develop self-efficacy, nurses told patients to constantly remind themselves that "I can make it"; (2) psychological intervention: Given the high disability caused by ischemic cerebral infarction, patients are under considerable psychological pressure and may be irritable and anxious, and have other negative emotions. Thus, nurses should promptly identify and solve these problems by communicating more with patients; providing patients with more care; understanding the psychological characteristics of patients; establishing a good relationship and mutual trust with the patient's family members; helping patients resolve bad moods; and actively cooperating with rehabilitation for early recovery; and (3) case study education: Nurses showed some successful cases to patients and their families to enhance the confidence of patients and their families in rehabilitation, to provide more encouragement to patients; and to enhance the patient's passion for rehabilitation. In addition, education from case studies improves patients' psychological status of and enhances patients' self-efficacy.

Efficacy evaluation

Self-efficacy nursing intervention was considered (1) obviously effective if patients actively cooperated with medical staff for rehabilitation treatment, had good daily rehabilitation training, optimistic and stable mood, and good nursing compliance; (2) effective if patients basically cooperated with rehabilitation and training, had stable mood, and restored confidence; or (3) non-effective if patients did not cooperate with rehabilitation and training, had a negative attitude towards rehabilitation, and had extremely unstable emotions.

Statistical methods

All data were analysed by SPSS18.0 statistical software. T-test was used for between-group comparison. If $P<0.05$, then the difference was considered statistically significant.

Results

Comparison of clinical nursing effects between the two groups of patients

After nursing intervention, the total clinical efficacy rate of patients in the observation group was 95% after nursing intervention and that of patients in the control group was 67.5%. The difference in the clinical efficacy of patients in the two groups was statistically significant ($P<0.05$), as shown in Table 1.

Table 1. Comparison of clinical nursing effect between the two groups of patients.

	Obviously efficient (number of patients)	Efficient (number of patients)	Non-efficient (number of patients)	Total efficiency rate (%)
Observation group	26	12	2	95
Control group	9	18	13	67.5
T value	/	/	/	2.0372
P value	/	/	/	0.0251

Comparison of changes in blood lipid levels between two groups before and after nursing

After nursing intervention, the blood lipid concentration of patients in the observation group significantly (all $P<0.05$) decreased compared with that of patients in the control group. This result indicated that the treatment received by the observation group significantly alleviates the high blood lipids of patients and has positive significance (Table 2).

Table 2. Changes in the blood lipid level of two groups before and after nursing intervention ($\bar{x} \pm S$).

Group Name	TC (mmol/L)		TG (mmol/L)		LDL-C (mmol/L)	
	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Observation group	5.23 ± 1.07	4.74 ± 1.20	1.53 ± 1.16	1.06 ± 1.04	3.89 ± 1.12	3.19 ± 1.22
Control group	5.25 ± 1.05	5.25 ± 1.15	1.52 ± 1.17	1.51 ± 1.12	3.89 ± 1.10	3.87 ± 1.25
T value	0.092	2.126	0.042	2.039	0	2.697

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P value	P > 0.05	P < 0.05	P > 0.05	P < 0.05	P > 0.05	P < 0.05

Comparison of the nursing satisfaction degree, compliance rate, and comfort between the two groups of patients

The nursing satisfaction degree, compliance rate and comfort of patients in the observation group were significantly (P<0.05) higher than those of the control group, as shown in Table 3.

Table 3. Comparison of the nursing satisfaction degree, compliance rate, and comfort between the two groups of patients (number of patients (%)).

	Nursing Satisfaction degree	Nursing compliance rate	Nursing comfort
Observation group	40 (97.56)	38 (92.68)	41 (100)
Control group	31 (75.61)	28 (68.29)	32 (78.05)
T value	8.25	3.74	5.29
P value	<0.05	<0.05	<0.05

Discussion

After the onset of cerebral infarction, cells in the central areas of the patients' brains will gradually die. The death of brain cells will damage surrounding ischemic penumbra and cause ischemic cascade reaction, which can lead to disability or even death if treated in time [4]. Clearing occlusive cerebrovascular at the early stage, delaying disease progression, saving ischemic penumbral nerve cells, and reconstructing function are essential to the clinical treatment of cerebral infarction. Ischemic cerebral infarction, one of the most common cerebral infarction diseases, is caused by cerebral ischemia and hypoxia [5,6]. The clinical symptoms of ischemic cerebral infarction are neurological and limb-based, such as physical movement disorders and language disorders; these symptoms seriously affect the health and safety of patients and considerably burden their family and the society [7].

Self-efficacy nursing intervention aims to develop patients' self-efficacy and confidence by enabling patients to feel that they can achieve something by themselves. The health condition of patients who are convalescing from ischemic cerebral infarction will improve when their confidence to perform physical work is restored. Moreover, patients will have stronger self-efficacy after improvement [8]. When their self-efficacy increases, patients will become more confident and more enthusiastic toward activities. Self-efficacy nursing intervention not only maintains general traditional care methods but also improves patients' self-efficacy. Medical staff should communicate with patients every day. For example, medical staff should inform patients about cases with positive outcomes and successful recovery; alternately, they should persuade patients to actively cooperate with treatment, take medicine on time, and maintain healthy diets. Medical staff could also tell patients some jokes to keep patients in a good

mood [9,10]. Meanwhile, family members should spend more time with patients so that they could feel the care and concern of their loved ones. In this research, patients received self-efficacy nursing intervention. After nursing intervention, the total clinical efficacy rate of patients in the observation group was 95%, whereas that of patients in the control group was 67.5%. The nursing satisfaction degree, nursing compliance rate, and nursing comfort of patients in the observation group were significantly higher than those of patient in the control group. After nursing, the blood lipid concentration of patients in the observation group significantly decreased compared with that of the control group. Thus, self-efficacy nursing intervention positively and significantly alleviated the high blood lipid concentrations of patients.

Conclusion

The results of this research indicated that the self-efficacy nursing intervention, which is based on routine nursing intervention, significantly improves the clinical efficacy, nursing satisfaction degree, nursing compliance rate, and nursing comfort of patients who are convalescing from ischemic cerebral infarction. Therefore, self-efficacy nursing intervention is suitable for clinical application to patients who are convalescing from ischemic cerebral infarction.

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