






Research on the Influence Value of Narrative Nursing Intervention on Ischemic Stroke Patients' Negative Emotions and Quality of Life based on Telemedicine

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Abstract: [Objective] To explore the value of telemedicine-based narrative nursing intervention on daily living ability and emotion regulation in patients with acute stroke. [Method] A total of 70 patients with acute ischemic cerebral infarction were randomly divided into two groups: the control group, the routine nursing group, and the experimental group, the remote narrative nursing intervention group. The patients in the routine nursing group were given simple daily life nursing guidance after discharge, and the patients in the remote narrative nursing intervention group were given remote narrative nursing intervention after discharge. [Results] The scores of daily living ability of the patients in the telenarrative nursing group were better than those in the routine nursing group, and the improvement of the caregiver stress index was greater than that in the routine nursing group ($P < 0.05$). [Conclusion] The narrative nursing intervention of telemedicine can help improve the daily living ability of ischemic stroke patients, relieve the pressure of caregivers, and improve the negative emotions of ischemic stroke patients.


1 INTRODUCTION


Telemedicine is outlined as “distant health services and activities through medical information and communication technology.” Diagnosis and treatment of distant patients, providing patient care, medical education, and drug monitoring across time and space constraints Management and other medical services. The International Council of Nurses (ICN) defines telenursing as the application of telemedicine technology for nursing care and to guide nursing practice. Tele-nursing is accompanied by telemedicine. For some chronic diseases, such as medication monitoring of patients with hypertension, comprehensive management of diabetic patients,


wound dressing change and comprehensive assessment of patients with pressure ulcers, tele-nursing can be used as a continuation of these chronic diseases. Nursing, through telephone, video, Internet and other electronic devices, establish remote intervention based on home care to improve the symptoms of chronic disease patients, effectively improve the quality of intervention, and improve the satisfaction of patients and their families. Especially suitable for stroke patients, the patient's ability to take care of themselves in daily life is seriously affected, and it is difficult to take care of themselves in life. Daily nursing intervention plays an important role in the recovery of patients' functions. However, due to limited medical resources, many patients with ischemic cerebral infarction go home to continue

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rehabilitation treatment and pressure ulcer care after discharge. Therefore, during the recovery process, the caregivers feel overwhelmed due to factors such as the patient's inability to take care of themselves with hemiplegia and the complex and diverse rehabilitation methods. This not only affects the quality of care, but also decreases the caregiver's health and quality of life. At this time, nursing intervention and guidance are needed. We use remote video and WeChat group narrative nursing intervention to intervene in patients' negative emotions and daily nursing guidance, and explore the effect of telemedicine narrative nursing intervention on the daily living ability, ease and care of patients with ischemic stroke. effects of stress and improving negative emotions in ischemic stroke patients.

The rest of this article is organized as follows. The second section introduces the research objects and methods in detail. The experimental results and discussion will be discussed in Section 3. Finally, conclusions are drawn in Section 4.

2 OBJECTS AND METHODS:

2.1 Research Object

A total of 60 patients with cerebral infarction and recovered from cerebral infarction admitted to our hospital from January 2020 to December 2021 were selected as the research subjects. Case inclusion criteria: ① In line with the diagnosis and treatment guidelines formulated by the Neurology and Cerebrovascular Disease Group of the Chinese Medical Association in 2014, transcranial CT or MR workers diagnosed with ischemic stroke; ② patients with clear consciousness and stable vital signs; ③ SDS score ≥ 53 points or SAS score ≥ 50 points; patients with barrier-free communication and no aphasia; ④ voluntary participation in this study, and signed the informed consent. According to the random number table method, they were divided into 30 cases in the control group and 30 cases in the experimental group. Among them, there were 13 male patients and 17 female patients in the experimental group, aged 43-88 years, with an average age of (54.55 ± 11.56) years; the shortest course of disease was 4 months and the longest was 32 months, with an average of (12.46 ± 1.42) months. In the control group, there were 16 male patients and 14 female patients, aged 40-87 years, with an average age of (54.32 ± 11.72) years; the shortest course of disease was 3 months, and the longest was 30 months,

with an average of (12.22 ± 1.32) months. There was no statistical difference in basic data between the two groups ($P > 0.05$). See Table 1 for details.

2.2 Methods

2.2.1 Preparation Before Discharge

Each patient shall have a tele-nursing registration form, including basic information such as the patient's address, electrical work, contact information of the primary caregiver, email address, and telephone number. Before arranging hospital discharge, evaluate pressure ulcers, medication, nutrition and other nursing issues, communicate with family members, formulate a tele-nursing plan reasonably, and inform the value of tele-nursing.

2.2.2 Remote Narrative Nursing Intervention Methods

The patients in the control group were given routine discharge nursing guidance and regular follow-up after discharge. In addition to routine nursing care, patients in the remote nursing group underwent home rehabilitation exercises and pressure ulcer nursing treatment for the first 3 months, and guided, supervised, and adjusted nursing plans through DingTalk video software and WeChat group conversations. Regular video follow-up was conducted once a month. In the last 3 months, only routine nursing intervention was performed, and regular follow-up visits were made.

2.2.3 The Implementation Process and Team Composition of Telemedicine Narrative Nursing

The members of this study consisted of 1 deputy chief physician majoring in neurology, 1 trainee in residency majoring in neurology, and 5 nurses who had been engaged in clinical nursing work in neurology for more than 5 years. Stroke patients may suffer from depression and anxiety due to hemiplegia. Some patients cannot accept the inconvenience caused by limb hemiplegia and cannot adapt in a short period of time. DingTalk and WeChat video conversations and telephone guidance are used. One video conversation per month is used to understand the changes of the patient's condition and nursing needs, formulate a feasible rehabilitation plan according to the actual situation of the individual, and provide remote nursing guidance and intervention. First, nursing staff conduct interactive activities such as guidance and consultation through remote video

sessions, which play the role of guiding, supervising, and adjusting nursing and rehabilitation programs. The main module of narrative nursing intervention is to provide video playback and web browsing functions, including stroke-related videos, dietary guidance, medication instructions, and self-management related health education materials. In addition, by sharing videos or experiences of patients and caregivers who have been more satisfied with their previous recovery, patients can increase their confidence in recovery. Improve the patient's ability to bear disability, overcome the inconvenience caused by the disease in life and work, and establish a positive life goal.

2.2.4 Home Visit

On the 20th of every month, we have a follow-up visit. face-to-face communication with patients and their caregivers, life guidance and employment training for patients, assessment of family environment, self-health management ability, psychology, and rehabilitation guidance and health education. Through close communication, patients and their caregivers are willing to express their true thoughts and difficulties they face. Nursing staff provide nursing guidance by formulating targeted nursing diagnosis and nursing measures.

2.2.5 Evaluation Indicators

Nursing patients in the experimental group and the control group were followed up at the 3rd month and 6th month after discharge to collect data. Self-rating anxiety scale (SAS) and self-rating depression scale

were used. The table (self-rating depression scale SDS) was used to evaluate anxiety and depression in the 3rd and 6th months after discharge. SAS includes a total of 20 items, and each item is scored from 1 to 4 points. The higher the score, the more severe the anxiety symptoms; the SDS includes 20 items, each of which corresponds to a symptom of depression. The more severe the depressive symptoms. Quality of life assessment: The MOS item short from health survey (SF-36) was used to assess the quality of life on the day of discharge. The SF-36 scale assesses patients' quality of life from both physical and psychological aspects. The higher the score, the better the quality of life.

2.2.6 Statistical Methods

ssps19.0 statistical software package was used for data entry, normal data were expressed as mean \pm standard deviation ($X \pm s$), and %, t and χ^2 test, $P < 0.05$ was considered statistically significant.

2.3 Results

2.3.1 Comparison of Patients' Scores at 3 and 6 Months after Discharge (SAS) and (SDS)

The patients in the control nursing group and the experimental nursing group were evaluated by the self-rating anxiety scale (SAS) and the self-rating depression scale (SDS) after the 3rd month and the 6th month after discharge, respectively.) scores, there was a statistically significant difference between the two groups ($P < 0.05$) table 1.

Table 1: Comparison of SAS and SDS scores at 3 and 6 months after discharge between the two groups ($x \pm s$).

Time	Group	Number of cases	SAS	SDS
3months after discharge	Test group	30	55.53 \pm 5.31	53.42 \pm 5.43
	Control group	30	57.23 \pm 5.35	53.36 \pm 5.46
	T value		-4.256	0.034
	P value		0.000	0.000
6months out of hospital	Test group	30	45.35 \pm 4.23*	48.56 \pm 4.21*
	Control group	30	48.13 \pm 4.46*	45.33 \pm 4.43*
	T value		-4.277	2.253
	P value		0.000	0.000

2.3.2 Comparison of Quality of Life Scores between the Two Groups of Patients

After the telemedicine narrative nursing intervention, the physical and psychological quality of life scores of the observation objects in the experimental group

were significantly higher than those in the control group, and there was a statistically significant difference between the two groups ($P < 0.05$). As shown in table 2.

Table 2: Comparison of quality of life scores between the two groups [points, x±s].

Fractional dimension		Control group (n=30)	Experimental group (n=30)	t	P
Physical aspect	Physiological function	72.1±19.37	85.36±12.40	-7.930	<0.001
	physiological function	61.40±37.21	72.51±34.70	-8.020	<0.001
	body pain	70.10±19.76	82.10±14.35	-7.525	<0.001
psychological aspect	general health	56.23±14.20	69.55±20.32	-12.531	<0.001
	Energy	63.40±16.07	74.45±15.01	-4.601	<0.001
	Social function	76.65±23.78	83.75±14.27	-3.017	0.004
	Emotional	69.40±40.39	75.56±33.49	-4.301	<0.001
	Function	64.31±16.25	74.90±17.86	-7.616	<0.001

2.3.3 Comparing Medical Compliance

The medical compliance in the experimental group

was higher than that in the control group (P<0.05) and the difference was statistically significant Table3.

Table 3: Comparison of medical compliance between the two groups [n(%)].

Group	n	Full compliance	Partial compliance	Non-compliance	Compliance
Research group	30	28 (93.33)	2 (6.67)	0 (0.00)	30 (100.00)
Control group	30	22 (73.33)	4 (13.33)	4 (13.33)	26 (86.67)
x ²	-	14.398	2.464	14.282	14.282
P	-	0.000	0.216	0.000	0.000

3 DISCUSSION

3.1 Telemedicine Combined with Narrative Nursing Intervention Can Help Improve the Negative Emotions of Ischemic Stroke Patients and Rekindle Their Hope in Life

With the acceleration of the aging process of the global population, the incidence of ischemic stroke patients is relatively high. Stroke has become the main cause of disability and death in my country. The survivors have different degrees of emotional disorders. Significant negative impact on quality and clinical care. Anxiety and depression are produced, and severe patients also have a sense of stigma. In this study, based on the Internet, narrative therapy as a means, through remote narrative nursing intervention, the results showed that the self-rating anxiety scale (SAS) and self-rating depression scale (SDS) of stroke patients in the experimental group were the third Monthly and 6th month evaluation, comparing the scores of the experimental group at 3 months and 6 months, the scale scores gradually decreased, indicating that the therapeutic intervention

time of narrative nursing was long, and the patient's anxiety and depression were gradually alleviated. Months later, the scores of the experimental group (SAS) and self-rating depression scale (SDS) were significantly lower than those of the control group (P < 0.05), indicating that Cheng medical treatment combined with narrative nursing intervention can help the anxiety and depression of ischemic stroke patients Emotional outcomes have a positive effect. Thereby reducing the occurrence of anxiety and depression. Wang Hongying et al reported that psychological intervention is beneficial to patients' negative emotion regulation, helps patients to understand themselves correctly, and actively cooperate to promote their own early recovery, which is consistent with the conclusions of this study.

3.2 Telemedicine-based Narrative Nursing Interventions Help Patients Improve Their Quality of Life and Reduce the Burden at Home

Through remote narrative nursing intervention, the scores of quality of life in the experimental group, such as physical function, physical pain, general health, energy, social function, emotional function,

and mental health, were higher than those in the control group ($P < 0.05$). It has been affected in all aspects of economy, physiology, psychology and society, with a decline in income, aggravation of economic burden, loss of hope in life, and a negative impact on the quality of life. It also develops remote nursing intervention, actively provides nursing services to patients through electro-active follow-up, timely assesses nursing problems after patients are discharged from the hospital, and urges patients to perform rehabilitation exercises through QQ messages, videos and other communication methods, which is helpful for reducing physical pain and improving mental health. It reduces the burden on the patient, improves life confidence, solves the difficulties and problems encountered by patients in different rehabilitation stages, reduces the distress and psychological pressure of patients facing complex nursing problems, helps to promote the early recovery of stroke patients, and reduces the risk of complications. to prevent recurrence of stroke.

3.3 Nursing Intervention based on Telemedicine Can Improve Patient Compliance and Help Patients Standardize Treatment

Organize a distance education class once a month to provide professional home care health education for patients and caregivers, which can improve the awareness and attention of patients and caregivers to relevant knowledge; nurses will visit home every month to confirm the prevention measures. The implementation of the situation, improve the compliance of patients with home health behavior, effectively avoid the occurrence of pressure ulcer injury, thereby improving the standardized treatment of patients. Telenarrative nursing intervention to urge patients and caregivers to adhere to correct exercise and self-management of healthy behaviors during home rehabilitation.

4 CONCLUSIONS

Based on telemedicine technology, narrative nursing intervention, DingTalk, group sharing, video and other means are used to provide specialized and individualized nursing treatment plans and psychological counseling for ischemic stroke patients, which is of great help in reducing ischemic stroke patients' anxiety and anxiety. Depression and negative emotions have a direct therapeutic effect,

providing similar patients and their families with vivid, easy-to-understand and emulated experience and treatment templates; increasing patient compliance and improving patients' quality of life. There are still shortcomings in this study. Since there are many factors that affect the negative emotions of ischemic stroke patients, how to further improve the psychological state and quality of life of ischemic stroke patients still needs to be confirmed by a large sample study involving multiple centers.

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