



Research Progress on Application of Time Nursing in Stroke Patients

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Abstract: Stroke is a common cerebrovascular disease with high mortality and disability in clinic, it is a "killer" that endangers human health and imposes a heavy burden on patients families and society. Stroke is one of the chronic diseases. The rehabilitation of patients is a gradual and long process. As an important part of the rehabilitation of stroke patients, the effectiveness of nursing directly affects the recovery effect and prognosis of patients. In recent years, nursing intervention based on time concept has begun to be popularized and applied in clinical practice. Time nursing measures combined with routine nursing are more conducive to improving patients nursing satisfaction, promoting the harmonious development of nurse-patient relationship, and improving patients psychological state and quality of life. Compared with routine nursing, it has more clinical advantages and has achieved ideal results. Based on this, this article will review the related research of time nursing on stroke patients from the aspects of overview and implementation strategies, and put forward suggestions and prospects for future research, in order to provide reference for time nursing-based intervention for stroke patients.

Keywords: time care, stroke, summary

1. Introduction

Stroke is the second leading cause of death in the world, with more than 13 million new cases worldwide each year[1]. In recent years, it has been characterized by the rapid growth of low-income groups, significant gender and geographical differences, and a younger trend. In the process of stroke prevention, treatment and rehabilitation, nursing is one of the key links, but the effects are different due to the different emphasis of different nursing modes. Time nursing is a working mode of nursing measures such as medication, eating and rehabilitation training in the best time according to the patient's own physiological laws during hospitalization. The core purpose is to promote the rehabilitation of patients and reduce the incidence of sequelae. Current research shows that, the intervention based on time nursing has advantages and is worthy of clinical promotion. This paper summarizes the current situation of time nursing applied to stroke patients, and provides reference for further time nursing for stroke patients in clinical practice[2].

2. Overview of time nursing

Time nursing, also known as "timing nursing", is a new discipline. It refers to the nursing staff using the physiological rhythm of the patient's body to care for the patient from the aspects of physiology, pathology, medication time, and psychological factors. The theoretical basis of time pharmacology, time diagnosis and time therapy involved in time nursing is the combination of nursing and time biology[3]. In the process of intervention, nurses follow the principle of time nursing, guided by the concept of "patient-centered" and "human-centered" holistic nursing, so as to provide nursing care according to time and disease[2].

3. Implementation strategy of time nursing

3.1 Application of time nursing in antihypertensive drugs

Hypertension is one of the important risk factors for stroke. For patients who use drugs to control hypertension, nurses should guide them to follow the biological rhythm of blood pressure fluctuations to exert the best efficacy of antihypertensive drugs. According to the biological rhythm of blood pressure "double peak and one valley", short-acting preparations are best taken in the early morning (about 06: 00) and after nap (about 14: 00), and long-acting preparations are best taken at 06: 00 in the morning[4]. At night, medication should be implemented according to the blood pressure fluctuations of different patients. Patients with large blood pressure fluctuations will gradually drop to a low point at night, so they can reduce the dose of medication or not before bedtime. Patients with stable blood pressure should take normal medication before bedtime

to maintain stable blood pressure.

3.2 The application of time nursing in rehabilitation training

Rehabilitation training for stroke patients should start as early as possible and be carried out step by step. The key period for the recovery of limb function is 6 months after onset, especially the first 3 months. Patients with cerebral hemorrhage should start rehabilitation training from 4 to 28 days after onset according to the situation, and patients with cerebral infarction should start from 4 days after onset[2]. In order to improve the effect of rehabilitation training, the peak period of blood pressure should be avoided during rehabilitation training, and the time period with high mental activity should be selected. Generally, 6: 00~7: 00, 14: 00~16: 00, 19: 00~21: 00 are selected for rehabilitation training[5]. In China, Wang Xiaojun applied the time nursing model to the rehabilitation training of stroke patients, and the observation group applied the rehabilitation training path based on the time nursing framework[6]. The results showed that this rehabilitation training path could improve the lower limb motor function and activities of daily living of patients.

3.3 The application of time nursing in disease observation

Condition observation is an important part to ensure the quality of nursing. Nurses should follow the time law of the occurrence and development of stroke, closely observe the symptoms and vital signs of patients, and quickly report to doctors after capturing the signs of the disease. Studies have shown that stroke is mostly concentrated in winter, but it also peaks in July and August, and the early morning is usually the peak time for death. The most common onset time of cerebral hemorrhage patients in a day is 0: 00~12: 00; the most common time period of cerebral infarction is 0: 00~6: 00, followed by the afternoon[7]. Therefore, nurses should strengthen the detection of the patient's condition (including blood pressure, blood glucose, etc.) in winter and summer, especially in the high incidence period of the day, and should also avoid the peak period of the disease when performing invasive operations on the patient[8]. Blood pressure is one of the key points in the monitoring of stroke patients. It has a fluctuating physiological rhythm. Generally speaking, blood pressure is the lowest between 2: 00 and 3: 00 in the morning, and then rises. After getting up in the morning, the blood pressure rises rapidly, reaching the first peak between 8: 00 and 9: 00 in the morning, and is basically at a relatively high level during the day. 17: 00~18: 00 is slightly higher as the second peak; it began to decline slowly at 18: 00[9]. The physiological rhythm of blood pressure fluctuation curve is "double peak and one valley", which provides a theoretical basis for us to plan the time of monitoring blood pressure.

Diabetes is an independent risk factor for stroke, and is associated with ischemic stroke, hyperlipidemia, microangiopathy, and macroangiopathy. For patients with stroke and diabetes, a blood glucose monitoring plan should be developed and recorded on the basis of mastering the time rhythm of blood glucose changes. Because the change of blood glucose is greatly affected by diet, the time of blood glucose monitoring is better before meals, 2 hours after meals and before bedtime. Some patients should also monitor blood glucose from 2 to 3 o'clock at night [10].

4. Summary

In summary, with the continuous strengthening of the "people-oriented" principle in nursing work, the application of time nursing in clinical practice has become a new requirement of medical development, and it is also an exploration direction to improve the quality of scientific nursing. The intervention based on time nursing can make our nursing intervention more personalized and scientific, and improve the quality of life of patients. At present, the research on the application of time nursing to stroke patients is in the exploratory stage. Stroke patients and medical staff have low awareness and willingness to implement time nursing. Standardized time nursing intervention programs suitable for stroke patients should be actively explored. Therefore, in the future research and clinical practice, we should expand the sample size, prolong the intervention time, explore the best intervention plan, and determine the standardized process and implementation rules.

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