Application of Nursing Risk Management in Patients with Cardiovascular Emergencies

Linping Dong[1], Xiaojuan Wang[1], Juan Chang[1], Linhuan Dong[2]
1. Department of Cardiovascular Medicine Shandong Second People's Hospital, Jinan 250022, China.
2. Department of emergency, The First Affiliated Hospital of Shandong First Medical University &Shandong Province Qianfoshan Hospital, Jinan 250014, China.

Abstract: **Objectives:** To study the nursing effect of nursing risk management in patients with acute cardiovascular disease. **Methods:** A total of 62 acute and critical cardiovascular patients admitted to the Second People's Hospital of Shandong Province from November 2021 to January 2023 were selected as the study objects, and the patients were randomly divided into control group and observation group. The control group adopted conventional nursing methods, while nursing risk management measures were carried out in the observation group. The nursing effects of the two groups were compared, and the incidence rate and patient satisfaction were analyzed according to the time. **Results:** The effective rate of the observation group was 93.55%, significantly higher than 61.29% of the control group, and the difference was statistically significant($P<0.05$). The occurrence of risk events in observation group was significantly less than that in control group, and patient satisfaction was significantly higher than that in control group ($P<0.05$). **Conclusion:** Nursing risk management could significantly improve the nursing effect of patients, reduce the occurrence of risk events, improve patient satisfaction, has a certain application value.

Keywords: Nursing Risk Management; Acute Cardiovascular Disease; Nursing Effect; Risk Event; Patient Satisfaction

Introduction

Cardiovascular and cerebrovascular system is a kind of chronic disease which is very harmful to health and affects the quality of life [1], The disease covers a lot of contents and has a high risk. With the continuous progress of society and the improvement of people's living standards, the rate of cardiovascular and cerebrovascular diseases is also rising year by year, and the risk of nursing is intensifying [2]. Therefore, strengthening nursing risk management is of great clinical significance to ensure patient safety and promote recovery.

1. Materials and Methods

1.1 Research object and grouping

A total of 62 critical cardiovascular patients admitted to the Second People's Hospital of Shandong Province from November 2021 to January 2023 were selected as the study subjects. The patients were randomly divided into a control group and an observation group, with 31 patients in each group. In the observation group, there were 17 males and 14 females, aged 50-78 years old, with an average age of 62.81±6.64 years old. In the control group, there were 19 males and 12 females, aged 52-76 years old, with an average age of 63.87±7.23 years old.

1.2 Inclusion and exclusion criteria

Inclusion criteria: 1)Meeting the admission criteria for cardiovascular diseases, age<80 years old; 2)Signed informed consent.

Exclusion criteria: 1)Severe mental illness; 2)Lose the ability to take care of oneself and be completely taken care of by others; 3)Very poor compliance.

1.3 Nursing method

The patients in control group were treated with routine nursing methods, nursing staff should follow the doctor's advice and clinical pharmacists for rational drug use for patients, establish a reasonable communication channel between doctors and patients [3]. The observation group adopted nursing risk management measures:1) Establishing a nursing risk management team: The head nurse with rich experience was selected to play the role of group leader in the group. The group leader need to organize regular inter-group discussion among the group members, mainly for the problems existing in the nursing process and the occurrence and causes of the previous nursing risks were investigated. According to the actual situation, the nursing plan was formulated for each patient in line with it; 2) Improve the professional competence of nursing staff: Strengthen the training of professional abilities of nursing staff to ensure that every nursing staff can handle these dangerous situations in a timely manner when encountering patients falling off the bed, falling down, and unplanned extubation; 3) Risk management implementation: Doing a good job of daily equipment management and maintenance, nursing staff in the use of special instruments need to carry out professional training and assessment and obtain relevant qualifications before use. At the same time, it was also necessary to strengthen the training of medical knowledge for nursing staff and improve the rules and regulations in the department.

1.4 Evaluation indexes

The nursing effect of the two groups was compared, and the nursing effect evaluation was divided into obvious, effective and ineffective: Significant effective——The patient's symptoms completely disappeared and the indicators returned to normal; effective——The patient's symptoms and indicators were beginning to show good signs; invalid——The patient's symptoms and indicators did not improve, and even increasingly aggravated. The occurrence of inter-group risk events was analyzed and their incidence rates were compared. Risk events mainly included complications, nurse-patient disputes and medical accidents. The difference in satisfaction before and after care was observed and compared between the two groups.

2. Statistical analysis

Measurement data were expressed using mean ± standard deviation ($\bar{x} \pm s$) and analyzed using a t-test. Counting data were represented by % and was compared by chi-square test. P<0.05 indicated statistically significant difference.

3. Results

3.1 Comparison of nursing effect between two groups

After nursing, 17 patients were significantly effective, 12 were effective, and 2 were ineffective in the observation group. In the control group, 11 patients were significantly effective, 8 were effective, and 12 were ineffective. The nursing effective rate of observation group was significantly higher than that of control group(P<0.05, Table 1).

Table 1. Comparison of nursing effect between two groups

Groups	Significant effective	Effective	invalid	total effective rate(%)
Observation group(n=31)	17(54.84%)	12(38.71%)	2(6.45%)	93.55%
Control group(n=31)	11(35.48%)	8(25.81%)	12(38.71%)	61.29%
P				<0.001

3.2 Comparison of the incidence of risk events between the two groups

As shown in Table 2, the occurrence of risk events in the observation group was significantly less than that in the control group, and the difference was statistically significant(P<0.05, Table 2).

Table 2. Comparison of the incidence of risk events between the two groups

Groups	complications	nurse-patient disputes	Risk event rate(%)
Observation group(n=31)	5(16.13%)	2(6.45%)	22.58%
Control group(n=31)	12(38.71%)	9(29.03%)	67.74%
P			<0.001

3.3 Comparison of nursing satisfaction between the two groups

After investigation, the satisfaction rate of patients in the observation group was significantly higher than that in the control group (P<0.05, Table 3).

Table 3. Comparison of nursing satisfaction between the two groups

Groups	satisfaction	dissatisfaction	Nursing satisfaction rate (%)
Observation group(n=31)	24	7	77.42%
Control group(n=31)	12	19	38.71%
P			<0.001

4. Discussion

Nursing risk has strong unpredictability, often is an emergency, if the nursing risk is relatively low will bring adverse effects on the normal treatment of patients, if the nursing risk is high, will lead to death of patients. In the course of acute and critical care in cardiovascular medicine, nursing risks mainly come from three aspects: hospital, medical staff and patients [4, 5].Therefore, in the nursing of acute and severe cardiovascular patients, we should pay attention to the risk factors, strengthen nursing risk management, provide efficient and high-quality services, improve the nursing effect of patients.

In this study, patients were divided into two groups according to the characteristics of patients. Nursing risk management and routine nursing management were respectively implemented. As a consequence, the nursing effective rate of patients with nursing risk management could reach 93.55% and the incidence of nursing risk events was also significantly reduced, and the patient satisfaction was higher. It showed that the nursing quality of patients can be improved comprehensively through nursing risk management, and the effect of nursing intervention can be significantly improved.

To sum up, nursing risk management is worthy of clinical promotion and application because of its pertinence, comprehensiveness and systematization, which can reduce the risk incidence and improve the nursing effect and patient satisfaction.

References

[1]   Wu GH, Chu HJ, & Hu W. Application effect analysis of nursing risk management in the nursing of severe

patients in cardiovascular medicine [J]. Capital Food and Medicine,2019; 26(03): 153.

[2]   Ding XR, & Ma J. Application and effect analysis of nursing risk management in nursing of cardiovascular patients with severe disease [J]. Electronic Journal of Practical Clinical Nursing Science,2019; 4(49): 18.

[3]   Gao Y. Nursing risk Management of severe patients in cardiovascular Medicine [J]. Electronic Journal of Clinical Medicine Literature,2018; 5(A0): 135-136.

[4]   Lv JJ. Risk assessment and prevention in acute and critical care of cardiovascular medicine [J]. Frontiers of Medicine,2020.

[5]   Zheng GY. Analysis of the impact of risk nursing awareness on nursing safety and patient nursing satisfaction in operating room [J]. Lingnan Journal of Emergency Medicine,2019; 1): 3.

*Corresponding author: Linhuan Dong, Department of emergency. The First Affiliated Hospital of Shandong First Medical University &Shandong Province Qianfoshan Hospital, Jinan, 250014, China.