

# The Value of Nursing Risk Assessment and Prevention in Cardiology

GAO Wen-yan

Hanzhong City Infectious Diseases Hospital, Hanzhong, Shaanxi, 723000, China

**Abstract: Objective:** To evaluate the value of nursing risk assessment and preventive nursing in patients with cardiovascular medicine. **Methods:** From January 1, 2015 to December 31, 2016, 124 patients were enrolled in this study. The patients were divided into control group and study group according to the order of admission. Patients in the control group were treated with routine care, and the study group was treated with routine nursing care on the basis of nursing risk assessment and corresponding preventive care. The incidence of cardiovascular risk events, the compliance of medication before and after nursing and the satisfaction of patients after nursing were observed. **Results:** Compared with the control group, the incidence of cardiovascular risk events in the study group was significantly lower and the nursing satisfaction was significantly improved ( $p < 0.05$ ). The scores of the medication compliance in the control and study groups were  $(2.83 \pm 0.06)$  and  $(2.97 \pm 0.10)$ , and the score of medication compliance in the study group was significantly better than that in the control group ( $p < 0.05$ ). **Conclusion:** The application of nursing risk assessment and preventive nursing in patients with cardiovascular medicine can reduce the incidence of cardiovascular risk and improve the patient's medication compliance and nursing satisfaction. It is an ideal nursing model and worthy of popularization and application.

**Key words:** cardiovascular medicine; nursing risk assessment; prevention and care

## Introduction

Cardiovascular disease common diseases are coronary heart disease, angina pectoris, myocardial infarction and heart failure, etc., have a high incidence, rapid progression of the disease, high mortality and other characteristics of clinical treatment and nursing process risk, if the care measures improper, will exacerbate the patient's condition, and even cause death<sup>1-2</sup>. Studies have pointed out that the cardiovascular disease in the care process of the implementation of risk assessment and to give preventive care, can reduce the risk of care-related<sup>3</sup>. In order to explore the value of nursing care risk assessment and preventive care in patients with cardiovascular medicine, the author selected 124 patients to

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doi: <http://dx.doi.org/10.18686/jn.v6i2.120>

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carry out this study, summarized as follows:

## **1. Information and methods**

### **1.1 General information**

A total of 124 patients were enrolled in this study from January 1, 2015 to December 31, 2016. All patients had a clear and self-communicative ability, all of which met the diagnostic criteria for cardiovascular disease and excluded combined with malignant tumors, liver and kidney dysfunction, requiring surgical treatment and infection of patients.

Patients were divided into control group and study group according to the order of admission, with 62 patients in each group. (59.29 ± 5.65) years old; Disease type: 38 cases of coronary heart disease, rheumatic heart disease in 11 cases, the average age (59.29 ± 5.65) years of age; Disease type: 38 cases of coronary heart disease, rheumatic heart disease in 11 cases, viral myocarditis in 9 cases, 4 cases of dilated cardiomyopathy; 39 cases of hypertension, 13 cases of diabetes, the other 10 cases. The average age (59.31 ± 5.67) years old was the age of 73 years; the age of the patients was 36 years, and the age of the patients was 36 years, coronary heart disease in 39 cases, rheumatic heart disease in 11 cases, 8 cases of viral myocarditis, dilated cardiomyopathy in 4 cases; 40 cases of hypertension, diabetes in 13 cases, the other 9 cases.

There was no significant difference in gender, age, course of disease and disease type between the two groups ( $p > 0.05$ ), and the comparability was good.

### **1.2 Nursing methods**

Control group: To give patients diet, life-care, medication and prevention of adverse events such as routine care. Study group: Nursing risk assessment and preventive care were given on the basis of control group. (1) Nursing risk assessment method<sup>4</sup>: The use of three assessment method to assess the risk of cardiovascular disease wards, an assessment: 2h hospital admission by the responsibility of nurses or nurses on duty according to the risk assessment by asking the patient or family members and the patient's condition to assess the risk of pressure, fall / fall from bed, leave the hospital and other risks, to establish the degree of risk, to the risk of risk patients with high risk warning, and obtain the patient or family signature, and then do nursing care and other measures to guard; Assessment: Based on the results of an assessment of high risk patients with full-day dynamic assessment, while nurses should urge the implementation of the preventive measures; three assessment: High-risk patients within 72h admission, nurses need to re-assessment, and to Nursing Department reported the results of the assessment, in the management process to find the problem to be corrected in time. (2) Treatment risk factors: Cardiovascular disease more serious, complex and changeable circumstances, resulting in the Department of nursing tasks heavy, more responsibility, the spirit of a high degree of tension, fatigue, the status quo, resulting in nursing errors and accidents , coupled with the risk awareness of nurses is relatively weak, the lack of clinical experience and work initiative, lack of communication skills, so that the handling of unexpected events is low, easy to lead to nurse-patient disputes; In addition, the patient did not follow the medication, emotional changes, easy to conflict with the caregiver. (3) Prevention and care: Standardize the management and management of nursing staff, scientific arrangements for the working hours of nurses to ensure a good working attitude; departments need to organize nursing staff to carry out nursing risk-related knowledge to learn to improve the level of nursing staff skills and The overall quality of nurses; nurses should be timely and properly communicate with the patient, to master the patient's mental state, to ease the negative emotions of patients; nurses to accurately convey the doctor's advice, and asked the patient on time medication.

### **1.3 Observe indicators**

The incidence of cardiovascular risk events, the compliance of medication before and after nursing and the satisfaction of patients after nursing were observed.

The patient care before and after the medication compliance score<sup>5-6</sup>: Patients without care and family members to remind the conscious and active medication for 3 points; Patients in the care and family members to remind to take the medication for 2 points; Patients in the care personnel and family members are reminded and not to take medication on time for 1 point.

Patients were discharged from the hospital's self-satisfaction survey scale to investigate the satisfaction of patients, a total of 10 entries, out of 100 points, score > 90 is very satisfied, 80 points < score ≤ 90 is satisfied, 60 points < score ≤ 80 is divided into general, score ≤ 60 is not satisfied<sup>7</sup>.

#### 1.4 Statistical analysis

The study data were accurately recorded into SPSS18.0 software, with 95% confidence interval for accurate analysis. Patient medication compliance score for the measurement data, with ( $\bar{x} \pm s$ ) to state, using t test; cardiovascular risk events and nursing satisfaction for the count data, with [n (%)], the use of chi-square test. If  $p < 0.05$ , the difference was significant, statistically significant.

## 2. Results

### 2.1 The incidence of cardiovascular risk events in both groups

The incidence of cardiovascular risk events in the study group was 3.23%, significantly lower ( $p < 0.05$ ) compared with 3.23% in the reference group. See Table 1 for details.

Table 1: Comparison of cardiovascular risk events in both groups [n (%)]

Group	Cardiovascular risk events
Control group(n=62)	8 (12.90%)
Study group(n=62)	2 (3.23%)
X <sup>2</sup>	3.9158
P value	0.0478

### 2.2 Preclinical compliance of both groups before and after treatment

The scores of medication compliance in the two groups were ( $2.83 \pm 0.06$ ) and ( $2.97 \pm 0.10$ ), respectively, which were significantly higher than those before nursing ( $p < 0.05$ ) in the control group and the study group), and the scores of medication adherence were significantly better in the study group than in the control group ( $p < 0.05$ ). See Table 2 for specific data.

Table 2 Comparison of medication compliance scores between the two groups before and after treatment ( $\bar{x} \pm s$ )

Group	Before treatment	After treatment	T value	P value
Control group (n=62)	2.07±0.49	2.83±0.06	12.1222	0.0000
Study group (n=62)	2.05±0.51	2.97±0.10	13.9387	0.0000

T value	0.2227	9.4527	-	-
P value	0.8242	0.0000	-	-

### 2.3 Nursing satisfaction of the two groups of patients

The study group of patients with nursing satisfaction was 77.42%, compared with the control group of 53.22%, significantly improved ( $p < 0.05$ ). See Table 3 for details.

Table 3: Comparison of Nursing Satisfaction in Two Group of Patients [n (%)]

Group	Very satisfied	Satisfied	Average	Dissatisfied	Satisfaction rate
Control group (n=62)	14(22.58%)	19(30.64%)	25(40.32%)	4(0.06%)	33(53.22%)
Study group (n=62)	26(41.94%)	22(35.48%)	13(20.96%)	1(0.02%)	48(77.42%)
X <sup>2</sup>	5.3143	0.3279	5.4639	1.8756	8.0103
P value	0.0212	0.5669	0.0194	0.1708	0.0047

## 3. Discussion

Nursing risk refers to the insecurity that may occur in the treatment and care of the patient in the hospital<sup>8</sup>. Nursing risk assessment and prevention nursing is a scientific nursing model, which refers to the identification of risk, to distinguish the degree of risk, identify the risk of dealing with the order of the premise, summed up the risk factors in the nursing process, analysis of risk factors and the resulting loss, and put forward the corresponding preventive care<sup>9-10</sup>.

Sudden and unpredictable characteristics of nursing risk, nurses need to have a certain ability to assess the risk of care to quickly and accurately implement risk management, to minimize adverse events, to the patient's most basic life safety<sup>11</sup>. In this study, the incidence of cardiovascular risk events in the study group was significantly reduced and the satisfaction of nursing was significantly improved ( $p < 0.05$ ). The scores of medication compliance in the control group and study group were ( $2.83 \pm 0.06$ ) and ( $2.97 \pm 0.10$ ) points were significantly higher than those before treatment ( $p < 0.05$ ), and the score of medication compliance in the study group was significantly better than that in the control group ( $p < 0.05$ ).

In summary, the use of nursing risk assessment and preventive care in patients with cardiovascular medicine can reduce the incidence of cardiovascular risk time, improve patient compliance and nursing satisfaction, is an ideal nursing model, it is worth promoting the application.

## References

1. Yang Fan, Run Qi, Run Hua Lin, et al. Cardiovascular Medicine in Patients with Nosocomial Infection Pathogen Distribution and Drug Resistance Analysis [J]. Chinese Journal of Nosocomial Infection, 2016, 26 (2): 341-342,345.
2. R Diekmann, K Winning, W Uter et al. Screening For Malnutrition Among Nursing Home Residents - A Comparative Analysis of the Mini Nutritional Assessment, the Nutritional Risk Screening, and the Malnutrition Universal Screening Tool. [J] Nutrition, health & amp; aging, 2013, 17 (4): 326-331.
3. Chen Xiang, Wang Chao, Tian Wenhua et al. Application of Framingham Risk Assessment Model in Family Physician Cardiovascular Risk Intervention [J]. China Primary Health Care, 2016, 30 (9): 6-8.

4. Sun Ruilian. Nursing Risk Assessment and Prevention in the Safety Management of Psychiatric Applications [J]. Chinese and Foreign Medical Research, 2016, 14 (35): 80-82.
5. Ma Shengjie. Comprehensive Nursing and Routine Care In Patients with Cardiovascular Disease in the Nursing Effect of Contrast [J]. Integrative Medicine cardiovascular disease, 2016, 4 (7): 56-57.
6. Torres, T., Sales, R., Vasconcelos, C. et al. Framingham Risk Score Underestimates Cardiovascular Disease in Severe Psoriatic Patients: Implications in Cardiovascular Risk Factors Management and Primary Prevention of Cardiovascular Disease [J] The Journal of Dermatology, 2013, 40 (11): 923-926.
7. Chen Caoyun, Huoyan Chang, Zhang Yang, et al. Application of Hierarchical Responsibility System Overall Nursing Model In Patients with Cardiovascular Medicine [J]. Chinese Journal of Contemporary Medicine, 2015, (22): 186-188.
8. Zhang Xiaoxia. Gynecological Perioperative Nursing Care Risk Assessment Early Warning System [J]. Chinese Journal of Maternal and Child Health Research, 2016, 27 (2): 452.
9. Dong Yanhong, Zhang Fohua, Zhu Chaobo. Nursing Risk Assessment and Monitoring In Patients with Cerebral Infarction in the Application [J]. Chinese Journal of Practical Neurology, 2015, 18 (20): 127-128.
10. Xu imitation, Yang Chunyan, Zhang Ping, et al. Catheter Nursing Risk Assessment in Patients with Hepatobiliary Surgery after Unplanned Extubation Prevention In The Application [J]. Chinese Journal of Modern Nursing, 2014, 20 (33): 4228-4229 The
11. PENG Su-wei, HU Xiao-wei, LUO Feidan et al. Application of Risk Assessment and Nursing Risk Management in Children's Intensive Care Unit [J]. Nursing Practice and Research, 2016, 13 (1): 110-112.