

Application of High-Quality Nursing in Coronary Heart Disease Nursing

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Abstract: **Objective:** To explore the effectiveness of applying high-quality nursing care to patients with coronary heart disease. **Methods:** 86 hospitalized patients with coronary heart disease registered in our hospital during the hospitalization period from June 2021 to June 2022 were randomly selected and were divided into a control group and an observation group, different nursing interventions were adopted for the two groups of patients. The control group were given conventional nursing methods, while the observation group receiving high-quality nursing methods. The final indicators of the two groups of patients were compared. **Result:** The nursing efficiency and various indicators of the observation group were significantly better than those of the control group ($P < 0.05$). **Conclusion:** Adopting high-quality nursing for patients with coronary heart disease can greatly promote the improvement of various clinical indicators and significantly improve the quality of life of patients.

Keywords: Coronary Heart Disease; Inpatient; High Quality Nursing; Clinical Indicators; Quality of Life

Introduction

Patients with coronary heart disease, whose main symptom is coronary artery atherosclerosis, will lead to cardiovascular diseases, which mainly occurs in elderly patients, with high disability and mortality rates. The initial symptoms of patients include chest tightness and difficulty breathing, while a few patients may experience persistent chest headaches and complications such as angina. Patients with long-term coronary heart disease not only seriously affect their quality of life, but also threaten their life safety. Therefore, when carrying out basic diagnosis and treatment for patients with coronary heart disease, corresponding nursing intervention measures should also be supplemented to encourage patients to actively cooperate with treatment, in order to promote the improvement of nursing efficiency and the quality of life of patients. High quality nursing has significant advantages over conventional nursing, as its high-quality and efficient nursing plan ensures the safety of patients' lives. Therefore, this article conducts a comparative study on these two nursing intervention models, and now elaborates as follows.

1. Research Materials and Methods

1.1 General Information

This research focuses on some hospitalized patients in our hospital, 86 patients who mainly hospitalized from June 2021 to June 2022 were randomly selected as the research objects, and divided into nursing differential groups, with 43 cases in each group. One was the control group of which the patients were given routine nursing, and the other group was the observation group of which the patients were implemented high-quality nursing. Patient selection criteria: All selected patients met the clinical diagnostic criteria for coronary heart disease, and presented with varying degrees of respiratory distress, palpitations, and chest tightness at the beginning of admission. After admission, the patient underwent medical examinations such as electrocardiogram and cardiac ultrasound, and was diagnosed with coronary heart disease. The consent of the patient and their family has been obtained for this study, and the informed consent form has been signed.

Exclusion criteria: (1) History of different types of severe cardiovascular diseases. (2) History of severe liver and

kidney dysfunction. (3) History of malignant tumors. (4) Individuals with mental abnormalities who cannot cooperate. (5) Patients with incomplete clinical data.

1.2 Research Methods

1.2.1 Control Group

Implementing routine nursing interventions for this group of patients and carrying out disease education and routine psychological interventions according to the basic nursing plan, so as to alleviate negative emotions of patients. Providing guidance on their disease condition and medication, follow medical advice to take corresponding nursing interventions.

1.2.2 Observation Group

The specific measures for high-quality nursing are as follows:

① High-quality Psychological Intervention Measures

After the patients been admitted to the hospital, the nursing staff first inquire about the patients' disease history and past medical history, timely grasp the patients' disease situation. According to the status of the patients' condition to carry out targeted psychological interventions, timely detect of negative emotions, and more communicate with the patients, to understand the root cause of the patients' negative emotions, and take corresponding nursing measures. Nursing staff can build We-Chat groups for patients with coronary heart disease to better provide psychological counseling, actively conduct healthy education and psychological guidance, and share complete examples of coronary heart disease cure within the group, allowing patients to communicate and interact with each other, alleviating negative emotions to improve patients compliance effectively.

At the same time, publicity material related to the disease condition can also be distributed in the form of animations or videos, so that patients and their families can timely understand the relevant knowledge of coronary heart disease and be aware of its contraindications. Popularization and education activities related to coronary heart disease knowledge can also be carried out in the hospital, allowing patients to have a deeper understanding of coronary heart disease knowledge and maintain a positive and peaceful attitude to cooperate with hospitalization treatment and nursing, and improving patients' compliance.

② High-quality Disease Condition Measures

Strengthening ward patrols, and inspecting the patients' infusion status every 15 minutes, and urging responsible caregivers to strengthen timely monitoring of the patients' vital signs to prevent adverse reactions. To deepen their understanding of coronary heart disease and related medicine, responsible nurses should inform patients of the importance of taking medication and advise them not to arbitrarily change the dosage of medicine to ensure their medication safety.

③ High-quality Diet Measures

Strengthening education and guidance on patients' diet habits and encouraging them to consume low calorie, low salt, and low-fat foods during hospitalization to promote digestion, and consume foods rich in protein and vitamins, such as fresh vegetables and fruits to prevent constipation. Advising patients to eat less high calorie and high sugar foods and drink less strong tea and coffee, ban smoking and alcohol, and consume less high cholesterol foods.

④ High-quality Exercise Measures

When patients are discharged, personalized guidance should be provided for their daily exercise and recovery. Based on the patients' recovery status, they should be instructed to exercise in the correct way and not engage in intense exercise, mainly walking and jogging. The amount of exercise should not be excessive, and adjustments should be made according to their own recovery situation and tolerance.

1.3 Observation Indicators

(1) Comparing and analyzing the complications of patients in the control group and the observation group, and observing whether there are any complications such as cardiac arrhythmias, angina pectoris, and hypotension.

(2) Evaluating the effectiveness of nursing interventions for two groups of patients. Significant efficacy: After nursing

intervention, symptoms such as palpitations and poor breathing no longer occur, and daily life can be restored without obvious complications. Efficacy: After nursing intervention, the patients' symptoms improved, their daily life resumed, and there were light complications such as hypotension. Non-efficacy: No significant improvement in symptoms, and the patients are unable to engage in daily life.

1.4 Statistical Processing

SPSS 20.0 software was used to process the relevant data in the text, use $\bar{x} \pm s$ to represent the measurement data, and use *t*-test method. The counting data is represented by *n* (%), using χ^2 -test method, $P < 0.05$ indicates that is with statistical significance.

2. Results

2.1 Comparison of Two Groups of General Information

Comparing the general baseline data of the two groups of patients, such as age, gender, and course of disease, the *P*-value was greater than 0.05 and had no statistical significance. As shown in Table 1.

Table 1 Comparison of General Information between Two Groups

| Groups | Cases Number (<i>n</i>) | Gender (<i>n</i>) | | Average Ages ($\bar{x} \pm s$, years) | Average course of disease ($\bar{x} \pm s$, years) |
|-------------------|------------------------------|---------------------|--------|--|--|
| | | Male | Female | | |
| Observation Group | 43 | 25 | 18 | 68.32±1.21 | 2.83±0.13 |
| Control Group | 43 | 26 | 17 | 68.31±1.22 | 2.84±0.14 |
| χ^2/t Value | | 0.048 | | 0.038 | 0.343 |
| <i>P</i> Value | | 0.826 | | 0.969 | 0.732 |

2.2 Comparison of Postoperative Complications between Two Groups of Nursing

The complication rate of the observation group was 2.33%, while the control group was 13.95%. The former had a significantly lower incidence of complications, with a *P*-value less than 0.05, which was statistically significant. The details are shown in Table 2:

Table 2 Comparison of Post-nursing Complications between Two Groups [*n* (%)]

| Groups | Cases Number (<i>n</i>) | Cardiac Arrhythmias | Angina Pectoris | Hypotension | Incidence of Complications |
|-------------------|---------------------------|---------------------|-----------------|-------------|----------------------------|
| Observation Group | 43 | 1 (2.33) | 0 (0.00) | 0 (0.00) | 1 (2.33) |
| Control Group | 43 | 2 (4.65) | 2 (4.65) | 2 (4.65) | 6 (13.95) |
| χ^2 Value | | | | | 3.887 |
| <i>P</i> Value | | | | | 0.049 |

3. Comparison of Nursing Effects between Two Groups after Nursing

Compared with the control group, the nursing effectiveness rate of the observation group patients was 97.67%, while the latter was 97.67%. The former was superior to the latter, with a *P* value less than 0.05. The details are shown in Table 3.

Table 3 Comparison of Nursing Effects between Two Groups [*n* (%)]

| Groups | Cases Number (<i>n</i>) | Significant Efficacy | Efficacy | Non-efficacy | Effective Rate |
|--------|------------------------------|----------------------|----------|--------------|----------------|
|--------|------------------------------|----------------------|----------|--------------|----------------|

| | | | | | |
|-------------------|----|------------|------------|-----------|------------|
| Observation Group | 43 | 26 (60.46) | 16 (37.21) | 1 (2.33) | 42 (97.67) |
| Control Group | 43 | 21 (48.84) | 16 (37.21) | 6 (13.95) | 37 (86.05) |
| χ^2 Value | | | | | 3.887 |
| P Value | | | | | 0.049 |

3. Discussion

Coronary heart disease is a common clinical chronic cardiovascular disease. The main reason why patients have this disease is that their coronary arteries have atherosclerosis and other symptoms. The pathological core of coronary heart disease is inflammation. A large number of inflammatory cells in the patients' body have damaged the artery wall of the patient, and the macrophages have swallowed fat drops, accumulated and deposited lots of foam cells, making the intima of the patients' blood vessels gradually harden, thus leading to coronary heart disease. The high incidence of coronary heart disease is mostly occurs to the elderly, and in severe cases, it can harm the patients' life safety. If a patient experiences myocardial ischemia and hypoxia, it is highly likely to cause various complications, such as myocardial infarction, arrhythmia, etc., putting the patient at risk of death, seriously threatening their physical and mental health and life safety.

After the admission of coronary heart disease patients, symptomatic treatment with relevant medicine can achieve timely results. However, the treatment time is extremely long, patients are prone to generating negative emotions, which is not conducive to the patients' treatment compliance and can seriously affect their quality of life. Based on this, in addition to symptomatic treatment of coronary heart disease patients, efficient and high-quality nursing interventions should also be supplemented to comprehensively improve the clinical efficacy of coronary heart disease patients.

The high-quality nursing mode has been optimized and improved on the conventional nursing mode, which can provide personalized and targeted nursing for patients, and its nursing effect is good. To provide high-quality nursing for patients with coronary heart disease, personalized and differentiated treatment and nursing plans can be developed based on the actual disease condition of the patients. Scientific analysis of the differential inducing factors of different coronary heart disease patients can be conducted to reasonably develop corresponding nursing interventions. Patients' families can also be provided with disease nursing guidance to achieve comprehensive supervision. Patients with high compliance can be actively praised, thus enabling patients to actively cooperate with treatment and nursing during hospitalization.

This study mainly randomly selected 86 patients from our hospital to implement different nursing interventions. The research results showed that providing high-quality nursing for patients with coronary heart disease has a higher nursing effectiveness rate than conventional nursing, a significantly lower incidence of complications, and a higher clinical efficacy.

This clinical research result further confirms the superiority and clinical application value of implementing high-quality nursing for patients with coronary heart disease. During the implementation process of high-quality nursing, comprehensive emotional intervention was carried out based on the psychological intervention measures of patients to improve their psychological states. High-quality guidance and nursing intervention guidance were provided for the patients' disease condition and life, significantly improving nursing efficiency and effectiveness. Compared with conventional nursing interventions, high-quality nursing interventions can effectively improve patients' symptoms, enhance patients' compliance, make doctor-patient relationships more harmonious, and significantly promote the improvement of nursing quality while ensuring nursing efficacy.

In summary, providing high-quality nursing for patients with coronary heart disease has a significant effect. It not only greatly improves the nursing effect, but also effectively reduces the incidence of complications in patients, which can be widely promoted in clinical practice

References

[1] Wang Y. Analysis of the Intervention Effect of High-quality Nursing on Patients with Coronary Heart Disease [J]. *Journal of Aerospace Medicine*, 2022,32 (4): 98-99

[2] Guo SS. The Application Effect of High-quality Nursing in Clinical Nursing of Coronary Heart Disease [J]. *Clinical Medical Research and Practice*, 2022,5 (5): 61-62

[3] Zhang T. Study on the Value of High-quality Nursing for Elderly Patients with Coronary Heart Disease and Arrhythmia [J]. *Chinese Journal of Practical Medicine*, 2022,15 (11): 69-70.

[4] Chen LH. The Application Effect of High-quality Nursing Intervention on Coronary Heart Disease in Clinical Nursing [J]. *China Continuing Medical Education*, 2022, 12 (32): 76-79.

[5] Niu XC. Exploration of the Application Value of High Quality Nursing in Clinical Nursing of Coronary Heart Disease [J]. *Continuing Medical Education*, 2022, 34 (9): 104-105.

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