

# Evaluation of the Effect of Quality Nursing Care on Patients with Coronary Heart Disease Combined with Hypertension

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**Abstract:** The aim is to explore the clinical nursing effects of quality nursing care on patients with coronary heart disease combined with hypertension. The study included 113 patients with coronary heart disease and hypertension treated in the Department of Cardiology at Tianjin Occupational Disease Prevention and Treatment Hospital from April 2019 to March 2021. The patients were divided into two groups using a random number table method: 56 in the routine nursing care group and 57 in the quality nursing care group. The routine care group received standard nursing, while the quality care group received quality nursing interventions. The study compared left ventricular ejection fraction, diastolic blood pressure, systolic blood pressure, quality of life, and nursing satisfaction before and after nursing care in both groups. Results showed that before nursing care, there were no significant differences in left ventricular ejection fraction, systolic and diastolic blood pressure between the two groups ( $P > 0.05$ ). After nursing care, the left ventricular ejection fraction in both groups increased compared to before, and both systolic and diastolic blood pressure decreased. The quality care group had a higher left ventricular ejection fraction and lower systolic and diastolic blood pressure than the routine care group, with statistically significant differences ( $P < 0.05$ ). The quality of life and nursing satisfaction scores in the quality care group were higher than those in the routine care group after nursing, with significant differences ( $P < 0.05$ ). Quality nursing care is of great significance in controlling blood pressure, improving cardiac function and quality of life in patients with coronary heart disease combined with hypertension. It has high patient satisfaction and is worth clinical promotion and application.

**Keywords:** Quality Nursing Care; Coronary Heart Disease; Hypertension; Nursing Effectiveness

## 1. Introduction

Coronary heart disease (CHD) is a prevalent cardiovascular disease among middle-aged and elderly populations. In recent years, the incidence of coronary heart disease coinciding with hypertension has been on a steady rise, posing a significant threat to patient health and safety while adversely affecting their quality of daily life[1]. Clinical research underscores the paramount importance of cardiovascular risk factor management and blood pressure control in improving the prognosis and life quality of patients with CHD and hypertension[2]. This study, therefore, investigates the clinical nursing effects of quality nursing care on patients with coronary heart disease combined with hypertension.

Coronary heart disease (CHD) is a leading cause of morbidity and mortality globally, characterized by the narrowing or blockage of the coronary arteries, the vessels that supply oxygen-rich blood to the heart muscle. When these arteries are narrowed or blocked, it can lead to critical conditions such as angina, heart failure, and myocardial infarction (heart attack). Angina, a symptom of coronary artery disease, manifests as chest pain or discomfort and is typically triggered by physical exertion or emotional stress. Heart failure, another consequence of CHD, occurs when the heart is unable to pump blood effectively, leading to symptoms like shortness of breath, fatigue, and fluid retention. Myocardial infarction, the most severe manifestation, happens when a coronary artery is completely blocked, causing a portion of the heart muscle to die due to lack of oxygen.

Hypertension, commonly known as high blood pressure, is frequently seen in conjunction with CHD. It exacerbates the condition by accelerating the process of atherogenesis—the buildup of plaque in the arteries—and increasing the workload on the heart. This heightened pressure against the arterial walls can lead to further narrowing and hardening of the arteries, hastening the progression of CHD.

The combination of CHD and hypertension places a significant strain on the heart, leading to an increased risk of fatal cardiac events. Patients with both conditions often experience a reduced quality of

life due to physical limitations, pain, and the psychological impact of living with chronic illnesses. Managing these patients requires a comprehensive approach that includes medical treatment to manage symptoms and halt the progression of the disease, lifestyle modifications to reduce risk factors, and regular monitoring to detect and address any complications promptly.

Moreover, the coexistence of CHD and hypertension necessitates vigilant management of blood pressure. Uncontrolled hypertension in the context of CHD can lead to severe complications, including heart attack, stroke, and kidney damage. It is critical for these patients to maintain blood pressure within a target range through medications, diet, and lifestyle changes.

In summary, CHD and hypertension are interrelated conditions that require careful management to prevent serious complications. The focus is on controlling symptoms, preventing disease progression, and improving the overall quality of life through a combination of medical treatment, lifestyle changes, and regular monitoring.

The management of CHD combined with hypertension presents a complex challenge in clinical settings. It necessitates a multifaceted approach that includes pharmacological treatment, lifestyle modifications, and comprehensive nursing care. Quality nursing care, in this context, goes beyond routine medical and postoperative care. It encompasses a holistic approach that addresses the physical, emotional, and psychological needs of the patients. Personalized care plans, patient education, emotional support, and close monitoring of vital signs and symptoms are integral components of this approach.

The current study was conducted at the Department of Cardiology, Tianjin Occupational Disease Prevention and Treatment Hospital. It involved 113 patients diagnosed with CHD and hypertension. The participants were randomly assigned to two groups: the routine nursing care group and the quality nursing care group. The routine care group received standard nursing interventions, which included basic medical care, medication administration, and standard patient education. In contrast, the quality nursing care group was subjected to an enhanced nursing protocol. This protocol involved individualized care plans tailored to each patient's specific needs, comprehensive patient education about disease management and lifestyle modifications, psychological counseling, and continuous monitoring and assessment of the patient's condition.

The primary outcomes measured in this study were left ventricular ejection fraction (LVEF), systolic and diastolic blood pressure, quality of life, and nursing satisfaction. LVEF is a critical indicator of cardiac function, and its improvement signifies better heart performance. Blood pressure control is vital in managing CHD and hypertension, as uncontrolled blood pressure can lead to adverse cardiac events. Quality of life and nursing satisfaction are subjective measures that reflect the patient's overall well-being and satisfaction with the care received.

The results demonstrated that while there were no significant differences between the two groups in terms of LVEF, systolic and diastolic blood pressure before the nursing intervention, significant improvements were observed post-intervention. The quality nursing care group showed a more significant increase in LVEF and a more pronounced reduction in both systolic and diastolic blood pressure compared to the routine care group. Furthermore, patients in the quality care group reported higher satisfaction with the nursing care and an improved quality of life.

These findings highlight the crucial role of quality nursing care in the management of CHD and hypertension. By providing comprehensive, personalized care, nursing interventions can significantly improve cardiac function, control blood pressure, enhance the quality of life, and increase patient satisfaction. This study underscores the need for integrating quality nursing care into the standard treatment protocol for patients with CHD and hypertension, advocating for its widespread adoption in clinical practice.

## **2. Materials and Methods**

### ***2.1 Clinical Data Selection***

This study was conducted at the Department of Cardiology in our hospital from April 2019 to March 2021. A total of 113 patients diagnosed with CHD and hypertension were included in the study. The inclusion criteria were: patients meeting the diagnostic criteria for CHD[3] and hypertension[4], with a diastolic blood pressure  $\geq 90$  mm Hg or systolic blood pressure  $\geq 140$  mm Hg, good clinical cooperation and compliance, and informed consent signed by the patients. Exclusion criteria included: severe concurrent infections, uncontrolled diabetes, severe complications, psychiatric disorders, history of drug

allergies, communication barriers, and poor patient compliance. The patients were randomly divided using a digital randomization method into two groups: a routine nursing care group (56 patients) and a quality nursing care group (57 patients). The routine care group comprised 32 males and 24 females, aged between 60 and 78 years, with an average age of  $64.79 \pm 7.47$  years and a Body Mass Index (BMI) ranging from 22.3 to 25.7 (average  $23.79 \pm 1.62$ ). The quality care group included 36 males and 21 females, aged between 60 and 78 years, with an average age of  $65.01 \pm 7.58$  years and a BMI ranging from 22.5 to 26.2 (average  $24.11 \pm 1.58$ ). There were no statistically.

## 2.2 Nursing Methods

The routine care group in standard nursing care for patients with coronary heart disease (CHD) and hypertension focuses on foundational aspects of patient management. This includes admission education, where patients and their families are informed about the nature of their condition, the expected course of treatment, and what to anticipate during their hospital stay. Education is a critical component, as it empowers patients with the knowledge necessary to understand their health condition and the importance of the treatment plan.

Medication management, as per doctors' orders, is another crucial aspect. Nurses ensure that patients receive their medications on time and educate them about the purpose, dosage, and potential side effects of each medication. They also monitor patients for any adverse reactions to medications and report these promptly to the healthcare team for timely management.

General lifestyle guidance is provided to support long-term management of their condition. This includes advice on dietary modifications, physical activity, stress management, and smoking cessation. These lifestyle recommendations are tailored to each patient's individual health status and are aimed at improving overall health and preventing exacerbation of their condition.

The quality care group, in addition to the routine care, received comprehensive quality nursing interventions, which included:

**(1) Health Guidance:** Health guidance is a critical component of quality nursing care, particularly for patients with chronic conditions like coronary heart disease (CHD) and hypertension. This approach encompasses several key aspects, including daily assessment of patients' conditions, medication guidance to enhance adherence, and effective disease management, all of which contribute significantly to the overall treatment and prognosis of these patients.

The cornerstone of health guidance is the daily assessment of patients' conditions. This involves a thorough evaluation of the patient's vital signs, symptomatology, and overall wellbeing. Nurses play a pivotal role in monitoring changes in the patient's condition, detecting early signs of deterioration, and responding promptly. This continual assessment allows for timely adjustments to treatment plans and can prevent complications, especially in patients with CHD and hypertension, where fluctuating blood pressure levels and cardiac function can pose significant risks.

Medication adherence is another critical factor in the management of CHD and hypertension. Non-adherence to prescribed medication regimens is a common issue that can lead to poor clinical outcomes. Nurses provide essential medication guidance, which includes educating patients about the importance of adhering to their medication schedule, understanding the purpose and side effects of their medications, and implementing strategies to overcome barriers to adherence. This may involve setting up medication reminders, simplifying medication regimens, or addressing patients' concerns and misconceptions about their medications.

Effective disease management involves a comprehensive approach that encompasses not only the medical treatment but also lifestyle modifications and psychosocial support. Nurses play a key role in educating patients about lifestyle changes that can improve their condition, such as dietary modifications, physical activity, stress management, and smoking cessation. These lifestyle interventions are particularly important in the management of CHD and hypertension, as they directly impact the patients' blood pressure levels, cholesterol levels, and overall heart health.

Patient education is an integral part of health guidance. It empowers patients with the knowledge and skills needed to manage their condition effectively. This includes understanding their disease process, recognizing symptoms that require medical attention, and knowing how to respond in case of emergencies. Education also extends to the patient's family, as their support can play a vital role in the patient's treatment adherence and lifestyle modifications.

Health guidance in nursing care adopts a collaborative approach, involving the patient, nursing staff, physicians, and other healthcare professionals. This multidisciplinary approach ensures a cohesive and comprehensive treatment plan, addressing all aspects of the patient's health. Regular team meetings, shared decision-making, and coordinated care plans are essential components of this collaborative approach.

The process of health guidance is dynamic and requires continuous evaluation and feedback. Nurses should regularly review the effectiveness of the care provided, gather feedback from patients, and make necessary adjustments to the care plan. This ongoing process of evaluation helps in identifying areas for improvement and ensures that the nursing care remains patient-centered and responsive to the changing needs of the patients.

In conclusion, health guidance is a multifaceted approach that plays a crucial role in the management of patients with CHD and hypertension. It involves regular patient assessment, medication adherence, comprehensive disease management, patient education, collaborative care, and continuous evaluation. Through these measures, nurses can significantly impact the clinical outcomes, enhance the quality of life, and improve the overall wellbeing of these patients.

**(2) Psychological Care:** Psychological care is a critical aspect of managing patients with chronic conditions like coronary heart disease (CHD) and hypertension. These conditions often have a profound long-term impact on patients, not only physically but also psychologically, leading to challenges such as depression, poor sleep quality, and an overall decline in life quality. Consequently, these issues can culminate in a loss of confidence in recovery and reduced compliance with treatment. To address these concerns, psychological care becomes an essential component of the holistic treatment approach.

CHD and hypertension are chronic conditions that impose significant stress on patients. The persistent worry about health, the burden of chronic medication, lifestyle restrictions, and the fear of complications like heart attacks or strokes can lead to mental health issues. Depression, anxiety, and stress disorders are common among these patients. These psychological conditions can further exacerbate their physical health, creating a vicious cycle that impedes recovery and disease management.

The first step in providing psychological care is the active assessment of the patient's mental health status. This involves evaluating their emotional well-being, identifying signs of depression, anxiety, or other mental health issues. Routine screenings using standardized tools and questionnaires can be effective in early detection of psychological problems. Moreover, regular discussions with patients about their feelings, fears, and concerns are crucial.

Effective communication is key to providing psychological support. Healthcare providers should establish a trusting relationship with their patients, where patients feel comfortable discussing their mental health issues without fear of judgment. Active listening, empathy, and reassurance are essential skills that nurses and other healthcare professionals must employ. Creating a supportive environment where patients can openly discuss their struggles plays a pivotal role in their psychological well-being.

Once psychological issues are identified, providing support and encouragement becomes vital. This can be in the form of counseling, participation in support groups, or referral to mental health professionals when necessary. Educating patients about the commonality of their feelings and the availability of support can help reduce the stigma associated with mental health issues. Encouragement, positive reinforcement, and reassurance about the effectiveness of treatment and lifestyle changes can boost patients' morale and aid in their recovery.

Integrating psychological care with the overall management plan for CHD and hypertension is crucial. This integration ensures that mental health is given equal importance as physical health. Treatment plans should include strategies to address stress, anxiety, and depression. This might involve relaxation techniques, mindfulness, cognitive behavioral therapy, and other therapeutic interventions tailored to the individual's needs.

Family members and caregivers play a significant role in the psychological well-being of patients with chronic conditions. Educating family members about the psychological impact of CHD and hypertension, and how to provide support, is essential. Encouraging strong social support networks can significantly improve the patient's mental health and treatment outcomes.

Regular monitoring of the effectiveness of psychological interventions is important. This involves reassessing the patient's mental health status periodically and adjusting interventions as needed. Feedback from patients about their psychological care and its impact on their quality of life should be sought to ensure that the care provided is responsive and effective.

In summary, psychological care is an indispensable part of managing CHD and hypertension. It involves comprehensive assessment, effective communication, supportive counseling, integration of mental health care, involvement of family and social support systems, and continuous monitoring and adjustment of care strategies. By addressing the psychological aspects of these chronic conditions, healthcare providers can significantly enhance patient outcomes, improve compliance with treatment, and boost overall quality of life.

**(3) Dietary Care:** Dietary care for patients with CHD and hypertension focuses on creating a balanced nutritional plan that supports heart health and blood pressure management.

Proper nutrition is critical for patients with CHD and hypertension. A diet that is low in fat and salt can help manage cholesterol levels and blood pressure, reducing the risk of heart attacks, strokes, and other cardiovascular events.

A low-fat diet aims to reduce the intake of saturated and trans fats, which can contribute to the build-up of plaque in the arteries, leading to atherosclerosis. Patients are advised to consume lean meats, low-fat dairy products, and to incorporate healthy fats from sources like fish, nuts, and olive oil.

Reducing salt intake is crucial for managing hypertension. High salt consumption is linked with increased blood pressure levels. Patients should be advised to minimize the use of table salt, avoid high-sodium processed foods, and choose fresh or unprocessed foods as much as possible.

A balanced diet is not just about reducing fat and salt; it also involves ensuring adequate intake of fruits, vegetables, whole grains, and lean proteins. This helps in maintaining overall health and providing essential nutrients and vitamins.

Patients with CHD and hypertension should avoid overexertion and maintain a regular, balanced lifestyle. Stress management and adequate rest are also crucial components of dietary care.

**(4) Exercise Guidance:** Exercise is a vital part of managing CHD and hypertension, as it helps in strengthening the heart and improving overall cardiovascular health.

Moderate exercise is recommended for patients with CHD and hypertension. Activities such as walking, stair climbing, dancing, and Tai Chi are excellent for improving heart health without putting excessive strain on the heart.

Walking is a simple and effective form of exercise. It improves circulation, strengthens the heart, and can be easily incorporated into daily routines.

Stair climbing is another practical exercise that can be done anywhere. It helps in building endurance and cardiovascular strength.

Dancing is not only a fun activity but also an excellent cardiovascular exercise. It helps in improving heart rate, stamina, and overall physical health.

Tai Chi, a form of martial art, is beneficial for both the mind and body. It promotes blood circulation, enhances cardio-pulmonary function, and is particularly suitable for elderly patients or those who may not be able to engage in more strenuous activities.

Exercise plans should be tailored to each patient's individual health status, age, and physical capabilities. It's essential to start slowly and gradually increase the intensity and duration of exercise under medical guidance.

Safety is paramount when recommending exercise to patients with CHD and hypertension. Patients should be advised to monitor their heart rate and blood pressure, and to stop exercising and seek medical attention if they experience symptoms like chest pain, severe shortness of breath, or dizziness.

Incorporating regular physical activity into a patient's daily routine is crucial for long-term management of CHD and hypertension. Health professionals should encourage and support patients in finding ways to stay active in a manner that is enjoyable and sustainable for them.

In summary, dietary care and exercise guidance are integral to the management of CHD and hypertension. A balanced, low-fat, low-salt diet, coupled with regular, moderate exercise, can significantly improve cardiovascular health, control blood pressure, and enhance the overall quality of life for these patients.

**(5) Condition Monitoring:** Condition monitoring is an essential aspect of managing patients with chronic conditions like coronary heart disease (CHD) and hypertension. This involves regular monitoring

of vital signs such as heart rate and blood pressure, which are critical indicators of cardiovascular health. The information gathered from this monitoring is used to adjust treatment and nursing plans, ensuring optimal patient care and safety.

In patients with CHD and hypertension, the stability of vital signs is crucial. Fluctuations in heart rate or blood pressure can indicate an increased risk of cardiac events or signal that the current treatment regimen may not be effective. Regular monitoring allows healthcare providers to track the patient's response to treatment and make necessary adjustments in a timely manner.

Heart rate monitoring involves checking the pulse rate, which is a simple yet vital measurement. It offers insights into the heart's rhythm and strength of the heartbeat. An irregular or unusually fast or slow heart rate can indicate underlying problems that require immediate attention.

Blood pressure monitoring is fundamental for patients with hypertension and CHD. High blood pressure is a significant risk factor for heart disease and stroke, and its effective management is key to preventing complications. Regular blood pressure measurements help in assessing the effectiveness of antihypertensive medications and lifestyle changes.

Based on the monitoring results, treatment plans may be adjusted. This could involve changing medication dosages, introducing new medications, or modifying lifestyle recommendations. Similarly, nursing plans are also adapted based on these results, which may include changes in the frequency of monitoring, patient education, or other nursing interventions.

Quick response to abnormal conditions is critical in preventing complications. If monitoring reveals a heart rate or blood pressure outside the normal range, healthcare providers must act swiftly. This may involve administering emergency medication, altering the current treatment plan, or, in some cases, hospitalization for further evaluation and treatment.

Accurate documentation and record-keeping of monitoring results are vital. This historical data provides a comprehensive view of the patient's condition over time, aiding in the evaluation of treatment efficacy and the planning of future care.

Educating patients on how to monitor their heart rate and blood pressure at home is a key component of condition monitoring. Self-monitoring empowers patients, enhances their understanding of their condition, and promotes adherence to treatment plans. Patients should be trained on the correct use of monitoring equipment, such as blood pressure cuffs and pulse monitors, and on how to interpret and record their results.

The use of technology, such as digital health apps and remote monitoring devices, can enhance the effectiveness of condition monitoring. These tools can provide real-time data to healthcare providers, enabling more precise and timely adjustments in treatment.

Condition monitoring should be integrated with the overall care plan. It is not just about tracking numbers but understanding these measurements in the context of the patient's overall health, symptoms, and quality of life.

Patients and caregivers should be aware of safety and emergency protocols in case of critical readings. Knowing when and how to seek urgent medical care is crucial for patient safety.

In conclusion, condition monitoring is a cornerstone in the management of patients with CHD and hypertension. Regular and accurate monitoring of heart rate and blood pressure, coupled with timely adjustments in treatment and nursing plans, plays a crucial role in ensuring patient health and safety. This proactive approach allows for early detection and intervention of potential complications, ultimately leading to better health outcomes and quality of life for these patients.

### **2.3 Observational Indicators**

The study compared changes in left ventricular ejection fraction (LVEF), diastolic blood pressure, systolic blood pressure, and quality of life before and after nursing care in both groups. Additionally, the study recorded the nursing satisfaction levels of the patients in both groups. The LVEF was measured using the Mindray Resona7 Doppler ultrasound diagnostic device. Diastolic and systolic blood pressures were measured using an Omron electronic blood pressure monitor. The patients' quality of life was assessed using a Quality of Life Assessment Short Form, with a total score of 100, where higher scores indicated better quality of life. Nursing satisfaction was evaluated using a custom-made satisfaction survey, which included aspects of daily nursing care, service attitude, ward environment, and overall

level of care. Similar to the quality of life assessment, the nursing satisfaction survey had a maximum score of 100, with higher scores indicating greater satisfaction with the nursing care received.

## 2.4 Statistical Analysis

The data were analyzed using SPSS software version 21.0. Quantitative data were expressed as mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ). The t-test was employed for the comparison of means between groups. A P-value of less than 0.05 ( $P < 0.05$ ) was considered statistically significant.

## 3. Results

### 3.1 Comparison of Left Ventricular Ejection Fraction and Blood Pressure Levels Before and After Nursing Care Between the Two Groups

Before nursing care, there were no statistically significant differences in LVEF, systolic blood pressure, and diastolic blood pressure between the two groups ( $P > 0.05$ ). After nursing care, the LVEF in both groups was higher than before nursing care, and both systolic and diastolic blood pressures were lower than before nursing care. The quality nursing care group showed better results than the routine nursing care group, with statistically significant differences ( $P < 0.05$ ), as shown in Table 1.

Table 1 Left ventricular ejection fraction and blood pressure levels

Group	Number of Cases	LVEF (%) Before Nursing	LVEF (%) After Nursing	t-value	P-value	Systolic Blood Pressure (mm Hg) Before Nursing	Systolic Blood Pressure (mm Hg) After Nursing	t-value	P-value
Routine Nursing Care	56	45.66 $\pm$ 4.45	49.33 $\pm$ 4.38 <sup>a</sup>	5.444	<0.01	165.78 $\pm$ 12.54	137.46 $\pm$ 9.69 <sup>a</sup>	4.121	<0.01
Quality Nursing Care	57	45.35 $\pm$ 4.61	53.76 $\pm$ 4.27 <sup>a</sup>	-	-	167.63 $\pm$ 11.49	130.52 $\pm$ 8.16 <sup>a</sup>	-	-
-	-	Diastolic Blood Pressure (mm Hg) Before Nursing	Diastolic Blood Pressure (mm Hg) After Nursing	t-value	P-value	-	-	-	-
Routine Nursing Care	-	111.43 $\pm$ 9.58	93.55 $\pm$ 6.72 <sup>a</sup>	4.993	<0.01	-	-	-	-
Quality Nursing Care	-	113.35 $\pm$ 9.47	87.64 $\pm$ 5.84 <sup>a</sup>	-	-	-	-	-	-

Note: Compared with the same group before nursing care, <sup>a</sup> $P < 0.05$ .

This table illustrates the significant improvements in both left ventricular ejection fraction and blood pressure levels after nursing care, particularly in the quality nursing care group. The statistical analysis indicates a marked improvement in cardiac function and blood pressure management in patients receiving quality nursing care, demonstrating the effectiveness of the nursing intervention in this patient population.

### 3.2 Comparison of Quality of Life and Nursing Satisfaction Scores Between the Two Groups

The post-nursing quality of life and nursing satisfaction scores in the quality nursing care group were significantly higher than those in the routine nursing care group, with statistically meaningful differences ( $P < 0.05$ ), as shown in Table 2.

Table 2: Comparison of Quality of Life and Nursing Satisfaction Scores Between Quality Nursing Care Group and Routine Nursing Care Group ( $\bar{x} \pm s$ , points)

Group	Number of Cases	Quality of Life Score Before Nursing	Quality of Life Score After Nursing	t-value	P-value	Nursing Satisfaction Score
Routine Nursing Care	56	55.45 $\pm$ 6.14	63.26 $\pm$ 5.58	4.543	<0.01	84.55 $\pm$ 6.41
Quality Nursing Care	57	54.68 $\pm$ 5.89	67.94 $\pm$ 5.37	5.493	<0.01	91.67 $\pm$ 7.33

This table illustrates the significant improvements in both quality of life and nursing satisfaction scores after nursing care in the quality nursing care group compared to the routine nursing care group. The statistical analysis indicates a marked improvement in patient-reported outcomes, demonstrating the effectiveness of the quality nursing intervention in enhancing the overall well-being and satisfaction of patients.

#### 4. Discussion

In recent years, there has been an increasing trend in chronic diseases such as coronary heart disease (CHD) and hypertension. Patients with CHD combined with hypertension face a significant risk to their life safety, as uncontrolled conditions can lead to severe emergencies like stroke. Previous reports have indicated that routine nursing care can alleviate the condition to some extent but often does not yield optimal results. Additionally, patient satisfaction with routine nursing care has been reported to be less than ideal [5]. Therefore, implementing quality nursing care for patients with CHD and hypertension is crucial for maintaining stable blood pressure and improving cardiac function. This study, building upon the foundation of routine care, employed quality nursing interventions focused on health guidance, psychological care, dietary care, exercise guidance, and condition monitoring, achieving favorable nursing outcomes.

The results of this study showed that after nursing care, both groups experienced an increase in left ventricular ejection fraction (LVEF) and a decrease in both diastolic and systolic blood pressure. Notably, the quality nursing care group had a higher post-nursing LVEF and lower diastolic and systolic blood pressure compared to the routine nursing care group, with statistically significant differences. These results suggest that quality nursing care plays a vital role in controlling blood pressure and improving cardiac function in patients with CHD and hypertension, consistent with related studies [6-7]. Additionally, the study found that the quality nursing care group had higher scores in quality of life assessments and nursing satisfaction after care, compared to the routine care group. This indicates that quality nursing care not only improves the clinical outcomes but also enhances the life quality and nursing satisfaction of patients with CHD and hypertension, aligning with findings from Huang Binna [8].

In summary, quality nursing care is significantly important for the management of blood pressure, cardiac function, and life quality in patients with CHD and hypertension. Given its high patient satisfaction and effectiveness, it is highly recommended for clinical application and wider adoption.

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