

# **Research on the Application Value of Comfort Nursing Intervention in the Nursing of Senile Chronic Heart Failure**

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*Abstract:* **Objective:** To analyze the application value of comfort nursing intervention in senile chronic heart failure nursing. **Methods:** The 120 heart failures discharged from our hospital in 2018 and 2019 were selected. The changes in nursing satisfaction, specialty nursing quality indicators and the incidence of pressure ulcers in hospitalized patients were compared and analyzed between the two groups. **Results:** The average satisfaction degree of the two groups was 97.48% and 97.22% respectively, and the difference between the groups was statistically significant (P<0.05). The correct rates of acute left heart failure in the two groups were 99.56% and 98.13%, and the difference between the groups was statistically significant (P<0.05), and two groups of patients with NYHA 3 heart failure or above intake control accuracy was 99.95% and 99.99%, and the difference between groups was statistically significant (P<0.05), and the difference between groups was statistically significant (P<0.05), and the difference between groups was statistically significant (P<0.05), and the difference between groups was statistically significant (P<0.05), and the difference between groups was statistically significant (P<0.05), and the difference between groups was statistically significant (P<0.05), and the incidence of pressure ulcer was 0.18% and 0, and there was no significant difference between the two groups. **Conclusion:** Comfort nursing intervention has achieved good nursing satisfaction and clinical effect in elderly patients with heart failure.

Keywords: Comfort Nursing Intervention; Senile Chronic Heart Failure

Heart failure refers to myocardial damage caused by various heart problems such as myocardial infarction, cardiomyopathy or blood flow, overload, inflammation and so on, resulting in changes in myocardial structure and function, and the final result is the patient's heart ventricular pump low blood or filling function<sup>[1]</sup>. The clinical manifestation is dyspnea and fatigue. Chronic heart failure refers to a condition in which patients persist for a long period of time, and it's a chronic condition common in older adults. This chronic disease needs a long time to treat, and the recurrence rate is high<sup>[2]</sup>. Patients need to endure a long time of pain, which significantly reduces the quality of life of patients. In recent years, with the continuous improvement of living standards, the incidence of chronic heart failure has also be-

come higher and higher, causing continuous and gradual damage to the patient's cardiomyocytes. It is an important factor in the mortality of patients<sup>[3-4]</sup>. The elderly over 60 years old are the high-risk groups of chronic mental failure, which seriously threatens the life and health of patients. With the intensification of China's aging trend, the number of elderly patients with chronic heart failure in China is showing an increasing trend<sup>[5]</sup>. Since the individual tissues and organs of elderly patients with chronic heart failure have different degrees of degeneration, most patients need to stay in bed after the illness, resulting in slow blood flow and increased blood viscosity, which is likely to cause many complications. This indicates that it is necessary to strengthen clinical care<sup>[6]</sup>. In clinical treatment, it is not only crucial to im-

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prove the condition of patients with heart failure, but also to take targeted measures for the patient's myocardial remodeling. It also needs to delay the development of patients' myocardial remodeling and prevent further deterioration of the disease with lower the hospitalization rate of heart failure. In this study, the 120 heart failure patients discharged from our hospital in 2018 and 2019 were selected to summarize the application effect of comfort care intervention in the nursing of elderly patients with chronic heart failure, so as to provide clinical reference.

## 1. Materials and methods

#### 1.1 The general materials

The 120 heart failures discharged from our hospital in 2018 and 2019 were selected. There were 38 male and 22 female patients in the 2018 group; the average age was ( $65.32 \pm 3.01$ ) between 61 and 75 years old; there were 38 males and 22 females patients in the 2019 group; the average age was ( $65.32 \pm 3.01$ ) between 61 and 75 years old. There was no significant difference in basic data between the two groups (P > 0.05). It's comparable.

#### 1.2 Methods

#### 1.2.1 2018 Goup methods

Patients in 2018 group were given routine nursing measures.

#### **1.2.2 2019 Goup methods**

2019 group adopted comfort care interventions with measures as follows:

(1) Posture management: The self-created pillow was used for heart failure patients to increase comfort and prevent falling from the bed.

(2) Capacity management: Patients were instructed to manage patient access, and nurses managed fluids for patients.

(3) Knowledge support: (i) The patient was provided with a teaching leaflet. (ii) The visualization of drug publicity and education were realized. It was required to make a magnetic card of the effect of the drug taken by the patient and the key points for attention, and stick it on the bedside, so that the patient could have a better understanding of the drug and increase the knowledge of the drug. They could also take the drug at ease and improve the satisfaction. (iii) Health education activities were held once a week by doctors and nurses in the ward. (iv) Face to face discharge guidance: the discharge guidance leaflet was updated every year and the discharge guidance for single disease was added. The patient was informed of the discharge procedures, and there was a copy of the flow of hospital information, guidelines on matters needing attention related to discharge (medication, diet, daily after-exercise, special precautions, time and place of return visit) and contact information of medical staff and so on, so that patients could consult at any time when they had nursing problems after discharge.

(4) Enhancing nursing services: carrying out nurse-patient communication case sharing every month, holding nurse-patient communication case scenario simulation competition every year to improve nurses' communication and resilience ability, enhancing nurses' empathy and compassion, and enhance services.

(5) Improving nursing skills: to improve the technique of intravenous therapy for nurses and develop new technique of medium and long catheters. For those who were particularly difficult in venipuncture, a medium-length catheter should be indwelled to avoid the difficulty of multiple punctures by the nurses and the suffering of the patient.

(6) Environmental management: each bed was equipped with a curtain to protect privacy, and a noise decibel meter was installed in the ward to keep the ward quiet.

(7) Discharge follow-up: in addition to the follow-up of the heart failure center, nurses conducted telephone follow-up within one week of the patient's discharge to understand their conditions and conduct the matters needing attention and targeted education. This method could improve the patient's knowledge of disease prevention and treatment, as well as their compliance with follow-up visits and taking prescribed medicine on time.

#### **1.3 Observation index**

The nursing satisfaction, specialty nursing quality indicators and the incidence of pressure ulcers in hospitalized patients were compared between the two groups. Among them, nursing satisfaction was a self-made questionnaire, which was divided into dissatisfied (60 points or less), relatively satisfied (61-80 points), and satisfied (80 points or more). Specialty nursing quality indicators included: the correct rate of acute left heart failure treatment and the correct rate of intake control for patients with heart function above grade III. The changes in nursing satisfaction, specialty nursing quality indicators and the incidence of pressure ulcers in hospitalized patients were compared and analyzed between the two groups.

#### **1.4 Statistical methods**

Using SPSS22.0 statistical software for data processing, the statistical data were indicated by frequency and percentage (%), and P < 0.05 was considered statistically significant by  $\chi$ 2 test.

## 2. Results

#### 2.1 Nursing satisfaction

The average satisfaction between the two groups was 97.48% and 97.22%, respectively, with statistically significant difference between the two groups (P < 0.05). A comparison table of average satisfaction between the two groups was shown in **Table 1**.

Groups	Average satisfaction	
2018 group	97.48%	
2019 group	97.22%	
χ2	7.9784	
Р	< 0.05	

**Table 1.** A comparison table of average satisfaction between the two groups

#### 2.2 Specialty nursing quality index

The correct rates of treatment of acute left heart failure between the two groups were 99.56% and 98.13%, and the difference between the groups was statistically significant (P < 0.05). The correct rate of intake control for patients with cardiac function above grade III in the two groups was 99.95% and 99.99%, and the difference between the groups was statistically significant (P > 0.05). Comparison table of two groups' specialty nursing quality index was shown in **Table 2**.

### **2.3 Incidence of pressure ulcers in hospitalized patients**

The incidences of pressure ulcer were 0.18% and 0, and there was no significant difference between the two

groups.

	Specialty nursing quality index		
	Correct rates of	Correct rate of intake	
Groups	treatment of	control for patients with	
	acute left heart	cardiac function above	
	failure (%)	grade III (%)	
2018	99.56%	99.95%	
group	99.50%		
2019	98.13%	99.99%	
group	98.13%		
χ2	89.5582	2.6675	
Р	< 0.05	>0.05	

 Table 2. Comparison table of two groups' specialty nursing quality index

## **3. Discussion**

Chronic heart failure is a common type of clinical disease, and it occurs mostly in elderly patients. Due to the decline of patient function, the incidence of this type of disease is increased. Currently, drug therapy is often used in patients with chronic heart failure, which can effectively improve the clinical symptoms of patients and improve their quality of life<sup>[7-8]</sup>. While the patient is receiving treatment, the corresponding interventional science and effective nursing methods are of great significance to improve the patient's treatment effect. Especially with the continuous deepening of follow-up concepts, the concepts of comfort care and holistic care are interrelated, and comfort care is regarded as the overall goal of holistic care<sup>[9]</sup>. Basic nursing and nursing research also pay great attention to the satisfaction of patients. With the assistance of medical staff, patients can have a good comfortable state during the treatment. Conventional nursing measures mainly carry out disease monitoring, medication guidance and other routine nursing methods for patients, so as to effectively ensure the clinical treatment effect of patients<sup>[10]</sup>. However, such nursing measures have limited effects and cannot effectively improve the quality of patient care. Comfortable nursing intervention is centered on patients and aims to provide patients with high-quality, scientific and comfortable nursing measures, so as to effectively enhance the treatment effect of patients and improve the quality of life of patients. It can be seen that comfort nursing is a more humane nursing method. The concept of this nursing method is to focus on the comfort of the patient, so that the patient can be physically and psychologically comfortable, and reduce the discomfort of the patient<sup>[11]</sup>. Nurses are required to understand the psychological and physiological needs of patients in the process of nursing; give timely answers to patients' doubts, and channel patients' negative emotions; carry out health education to patients and their families, popularize the pathogenic factors and treatment methods of chronic diseases, and answer the doubts of patients' families. Therefore, patients can have good compliance in follow-up treatment. It helps patients adjust to a reasonable schedule and appropriate exercise. Patients can make a reasonable diet plan and reduce the intake of greasy, stimulating and spicy food. They can also be encouraged the intake of fruits and dietary fiber food and maintain bowel movements. Patients can avoid the burden on the heart caused by forced defecation.

The research in this study showed that the average satisfaction degree of the two groups was 97.48% and 97.22% respectively, and the difference between the groups was statistically significant (P<0.05). The correct rates of treatment of acute left heart failure between the two groups were 99.56% and 98.13%, and the difference between the groups was statistically significant (P<0.05). The correct rate of intake control for patients with cardiac function above grade III in the two groups was 99.95% and 99.99%, and the difference between the groups was statistically significant (P>0.05). The incidence of pressure ulcer was 0.18‰ and 0, and there was no significant difference between the two groups. It showed that although the two groups of patients adopted the same nursing methods, with the improvement of the application of comfort nursing intervention in elderly patients with chronic heart failure, the patients' satisfaction was gradually improved. However, due to the deepening of the disease, the accuracy rate of acute left heart failure management showed a significant decrease. There was no change in the accuracy rate of volume control in patients with cardiac function above grade III in the two groups. At the same time, the incidence of pressure ulcers in the two groups of hospitalized patients reached 0 in 2019, indicating that our hospital's comfort nursing intervention has achieved the best clinical results. The comfort nursing intervention adopted for patients can formulate more humanized and personalized nursing

plans for various physical and psychological problems of patients. It provides the patients with the required clinical nursing services and promotes the patients to achieve physical, psychological and other aspects.

To sum up, comfort nursing intervention has achieved good nursing satisfaction and clinical effect in senile patients with heart failure. Taking comfort nursing intervention measures for patients with chronic heart failure is conducive to effectively alleviate the adverse psychological state problems faced by patients, and it can also subsequently improve patients' overall satisfaction and promote patients to recover as soon as possible.

## References

- Lan D, Xiao J. Clinical value research of targeted nursing intervention in elderly patients with chronic heart failure. Genomics and Applied Biology 2018; 37(3): 1045–1051.
- 2. Tabata M, Akiyama A, Kamada Y, *et al.* Comfortable walking speed predicts the readmission due to decompensated heart failure in elderly patients with chronic heart failure. Journal of Cardiac Failure 2016; 22(9): S184.
- Wang W, Wang Y, Bu H. Evaluation of the application effect of standardized phase I exercise rehabilitation in elderly patients with chronic heart failure (in Chinese). Chinese Journal of Practical Nursing 2018; 34(35): 2727–2732.
- 4. Qiao S, Chai Z, Tang L, *et al.* Influence of nursing intervention based on "Timing It Right" on heart function and emotion in elder patients with chronic heart failure. Chinese Journal of Modern Nursing 2018; 24(25): 3051–3054.
- 5. Uchmanowicz I, Kusnierz M, Jankowska-Polanska B, *et al.* The influence of frailty syndrome on the number of hospital readmissions in elderly patients with chronic heart failure. European Journal of Cardiovascular Nursing 2016; (15): 4.
- 6. Gopal CP, Ranga A, Joseph KL, *et al.* Development and validation of algorithms for heart failure patient care: A Delphi study. Singapore Medical Journal 2015; 56(4): 71.
- Xue X. Application of comfort nursing intervention in senile chronic heart failure patients (in Chinese). Nursing Research 2018; 32,611(15): 146–147.
- 8. Felice MD, Alfonsi G, Giuliani AR, *et al.* Heart failure: Tools for nursing and medical treatment. Cardiology Journal 2011; 18(4): 411.
- Sezgin D, Mert H, Zpelit E, *et al.* The effect on patient outcomes of a nursing care and follow-up program for patients with heart failure: A randomized controlled trial. International Journal of Nursing Studies 2017; 70: 17–26.
- 10. Del SD, Pulignano G, Maggioni AP, et al. Assessment of disability and quality of life in elderly pa-

tients with heart failure: Data from the IN-CHF-Nursing Study. European Journal of Heart Failure 2015; 2(1): 100.

11. Shiba N. Epidemiology and real-world issues of elderly patients with chronic heart failure in super-aging society. Journal of Cardiac Failure 2017; 23(10): S10.