

Personalized Care for Elderly Patients with Shingles

Xiuli Lu^{1,a,*}

¹*Department of Plastic Surgery, the Second People's Hospital of Hefei, Hefei, China*

^a*18656637745@163.com*

^{*}*Corresponding author*

Keywords: Herpes zoster; Nursing strategy; Personalized care

Abstract: To explore the effect of personalized nursing in patients with herpes zoster. A total of 90 patients with herpes zoster admitted to our hospital from July 2023 to December 2023 were randomly divided into observation group (n=45) and control group (n=45). The control group received western medicine treatment and routine nursing, and the observation group was combined with personalized nursing on the basis of the control group, and the pain and emotional state of the two groups were compared. Before nursing, there was no significant difference between the observation group and the control group, $P > 0.05$. After nursing, there was significant difference between the observation group and the control group ($P < 0.05$). The time of edema regression, pain disappearance and skin healing in the observation group were shorter than those in the control group, with significant differences ($P < 0.05$). After 3 months of treatment, the incidence of neuralgia in the observation group was significantly lower than that in the control group, with significant differences ($P < 0.05$). This study shows that the introduction of personalized nursing program in the nursing of elderly patients with herpes zoster can significantly improve the pain and emotional state of patients, accelerate the process of edema regression, pain relief and skin healing, compared with only western medicine treatment and conventional nursing. In addition, personalized care can also effectively reduce the incidence of neuralgia after 3 months of treatment. These results suggest that personalized care can not only improve patient comfort and quality of life, but also provide a more effective care strategy for elderly patients with shingles. Therefore, it is recommended to widely adopt personalized nursing programs in the care of elderly patients with shingles in order to promote the overall recovery of patients and improve the therapeutic effect.

1. Introduction

In the field of modern medical care, with the diversification and individuation of patients' needs, the traditional "one-size-fits-all" nursing model has gradually failed to meet the specific needs of all patients, especially in the elderly group, due to the more significant differences in physical, psychological and social environment^[1]. Therefore, as a new nursing model, personalized nursing aims to provide more appropriate and effective nursing services through in-depth understanding of patients' specific needs and conditions, so as to improve the treatment effect and quality of life of patients. As a common viral skin disease, herpes zoster has a high incidence, especially in the elderly population. It is characterized by painful rash and often accompanied by postthumous neuralgia, which

brings great physical pain and psychological burden to patients^[2]. Therefore, for the nursing of this specific disease, traditional methods are often difficult to comprehensively solve the problems faced by patients, and more refined and personalized nursing strategies are needed^[3]. The core concept of personalized nursing is "patient-centered", which requires nursing work not only to carry out medical advice, but more importantly, to formulate the most suitable nursing plan for the patient from the perspective of the patient and comprehensively consider the patient's physiological, psychological and social and cultural background^[4]. In this process, nursing staff need to possess good communication skills, clinical experience and critical thinking ability. Through in-depth communication with patients and their families, they can understand patients' medical history, condition changes, living habits and psychological status, etc., so as to provide patients with more accurate and effective nursing services. In addition, personalized nursing also emphasizes the importance of interdisciplinary cooperation^[5]. In the implementation of personalized nursing for elderly patients with herpes, in addition to nursing staff, it is also necessary to include doctors, dietitians, psychological counselors and other professionals in the nursing team to jointly develop and implement nursing plans. This interdisciplinary cooperation can more comprehensively meet the needs of patients and improve the efficiency and effect of nursing^[6]. This study explored the effect of personalized nursing in the nursing of patients with herpes zoster.

2. Data and methods

2.1. General information

A total of 90 patients with herpes zoster admitted to our hospital from July 2023 to December 2023 were randomly divided into observation group (n=45) and control group (n=45). The 90 patients were divided into observation group and control group by random number table method. 45 patients in the observation group, including 24 males and 21 females, were selected. The mean age was (55-85) 67.21±6.45 years. The control group consisted of 45 patients, including 23 males and 22 females, with an average age of (55-84) 67.68±5.42 years.

Inclusion criteria: Meeting the clinical diagnostic criteria for herpes zoster; The age range is between 18 and 65 years; Willing to participate in the study and sign the informed consent;

Exclusion criteria: skin infection, eczema and other skin diseases; Have serious diseases of the heart, liver, kidney, lung and other organs; Pregnant or lactating women; Patients who have previously received similar interventions; Have a serious mental illness or cognitive impairment; Patients who are unwilling to participate in the study or unable to cooperate to complete treatment and follow-up;

There was no significant difference between the two groups ($P>0.05$). This study has been recognized and approved by the hospital Ethics Committee.

2.2. Method

The control group received routine nursing except western medicine treatment. Nursing methods: Nursing staff should keep the bed flat, assist the patient to maintain a protective position, and carry out drug treatment and neuronutritional treatment according to the doctor's advice. In addition, psychological care, through encouragement and comfort and other means to help patients eliminate adverse psychological factors, and ask patients' families to accompany patients to distract their attention.

Patients in the experimental group received personalized care in the following ways.

2.2.1. Pain management

Pain is one of the most common and unbearable symptoms for older people with shingles. The nursing staff should first understand the intensity, nature and specific location of the patient's pain through effective communication, and use a 0-10 pain scoring scale to quantitatively assess the degree of pain. Based on the evaluation results, the caregiver should work with the physician to adjust or recommend appropriate analgesics for the patient, while monitoring the effects of drug use and possible side effects. In addition to medication, physical therapy such as cold or warm compresses can be applied to relieve pain. The nursing staff should choose the appropriate method according to the actual situation and preference of the patient, such as cold compress in the initial stage of severe pain, in order to reduce the excitability of nerve endings and reduce the sense of pain; In later stages of the disease, warm compresses may be more appropriate to help improve local blood circulation and relieve pain. In addition, guiding patients to appropriate relaxation training and breathing exercises is also one of the effective ways to relieve pain.

2.2.2. Emotional support

Elderly patients with shingles are often accompanied by anxiety, depression and other negative emotions, which will affect the treatment effect and quality of life of patients. Therefore, caregivers should provide positive emotional support and encourage patients to express their concerns and emotions by establishing a good relationship of trust. Caregivers should listen to patients' feelings, provide compassion and understanding, and help patients relieve psychological stress through positive communication. At the same time, caregivers can refer patients to support groups or psychological counseling to share experiences and feelings with other patients, thereby reducing feelings of loneliness and helplessness. Psychological education is provided to patients to help them understand the natural course of the disease and treatment methods, enhance their self-management ability and sense of control over the disease, and thus actively face the treatment and rehabilitation process^[7].

2.2.3. Skin care

Skin damage in people with shingles needs to be properly cared for to prevent infection and promote healing. The nursing staff should regularly check the skin damage site of the patient, clean and dry in time, and use aseptic technology to replace the dressing to prevent bacterial infection. According to the specific situation of the patient, choose the appropriate antibacterial or healing promoting topical drugs. In addition, it is important to educate patients and their families about proper skin care methods. Caregivers should instruct patients to avoid scratching the affected area to avoid causing a secondary infection or prolonging healing time. At the same time, patients should be reminded to pay attention to the moisturizing of the skin, avoid the use of irritating skin care products, and choose mild and moisturizing cleaning products and lotions to maintain the health of the skin and reduce discomfort.

2.2.4. Nutritional support

Nutrition plays a crucial role in the recovery of elderly patients with shingles. The nursing staff should assess the nutritional status of the patient, especially for patients with loss of appetite, poor digestion and absorption or with specific nutritional needs, and should provide personalized nutritional recommendations. Proper nutritional support can help patients maintain their strength and speed up the recovery process. Foods rich in protein, vitamins C and E, and zinc are recommended, which are especially important for skin repair and immune boost. At the same time, caregivers should

encourage patients to drink more water and maintain a good state of hydration, which helps to promote metabolism and detoxification. For patients with difficulty swallowing or loss of appetite, consider providing easy-to-take nutritional supplements or liquid foods that are high in energy and protein.

2.2.5. Activity and function maintenance

Maintaining moderate physical activity is beneficial to the recovery of elderly patients with shingles. Caregivers should develop personalized activity plans according to the patient's health status and mobility to avoid muscle atrophy and joint stiffness caused by prolonged bed rest. Simple activities in bed, sitting exercises, or light hand exercises with the assistance of a caregiver can help patients maintain muscle strength and joint flexibility, improving quality of life. At the same time, in order to prevent falls and other accidental injuries, caregivers should ensure the safety of patients when moving, install auxiliary facilities such as handrails and non-slip MATS when necessary, and educate patients about correct movement techniques.

2.2.6. Education and self-management

Providing older shingles patients and their families with comprehensive disease-related knowledge and self-management skills is an integral part of a personalized care plan. Caregivers should ensure that patients and family members understand the characteristics of the disease, possible complications, treatment methods, and daily care skills to enhance their awareness and management of the disease. In particular, patients are taught how to observe changes in their condition, the proper use of medications, and when to seek medical help. At the same time, guidance on emotional management, pain control, and healthy lifestyle is provided to help patients and families establish positive coping strategies to promote overall recovery and quality of life of patients.

2.3. Observation index

Pain rating: VAS was used. The painless rating was 0; Severe pain was rated at 10; A score of 0-10 indicates different levels of pain. The incidence of postherpetic neuralgia and recovery of postherpetic neuralgia in both groups were recorded by telephone at 30, 50, 80 and 110 days after the end of treatment.

The scores of SAS and SDS before and after the two groups were compared, and the corresponding scales were used for evaluation. The SAS scale contains 20 items, among which the cut-off value for evaluating the presence or absence of anxiety symptoms is 50 points.

Observe the difference of edema subside time, pain subside time and skin healing time between 2 groups after hormone use; The incidence of sequelae of 2 groups after 3 months of treatment was observed.

2.4. Statistical method

Statistical software SPSS22.00 for windows was used to analyze the clinical data of all patients. The counting data were analyzed by Chi-square test with the rate (n%), and the measurement data were expressed by T-test with (mean \pm standard deviation), and $P < 0.05$ was used as the criterion for the existence of statistical significance.

3. Result

3.1. Comparison of SAS and SDS scores between the two groups

Before nursing, there was no significant difference between the observation group and the control group, $P > 0.05$. After nursing, there was significant difference between the observation group and the control group ($P < 0.05$). See Table 1 for details.

Table 1: SAS and SDS scores($\bar{x} \pm s$)

Group	Number of cases	SAS		SDS		VAS	
		Before care	After care	Before care	After care	Before care	After care
Observation group	45	62.32±1.22	44.21±2.21	66.43±2.12	43.21±2.21	7.21±0.36	2.66±0.98
Control group	45	62.21±1.21	55.32±1.21	66.21±2.11	56.32±1.21	7.26±0.96	5.63±1.54
t	-	0.3506	24.1518	0.4029	28.4996	0.6294	9.1954
P	-	0.7271	0.0000	0.6885	0.0000	0.1879	0.0000

3.2. Edema subsided, pain disappeared and skin healing time in 2 groups

The time of edema resolution, pain disappearance and skin healing in the observation group were shorter than those in the control group, with significant differences ($P < 0.05$), as shown in Table 2.

Table 2: Observed the time of edema remission, pain remission and skin healing in the two groups($\bar{x} \pm s$)

Group	Number of cases	Edema resolution time(d)	Pain removal time(d)	Skin healing time(d)
Control group	45	5.99±1.09	9.35±2.75	9.40±3.02
Observation group	45	2.95±0.77	7.25±2.04	7.53±1.98
t	/	5.362	6.147	6.011
p	/	0.002	0.000	0.000

3.3. The difference of sequelae incidence between the two groups after 3 months of treatment was observed

After 3 months of treatment, the incidence of neuralgia in the observation group was significantly lower than that in the control group ($P < 0.05$), as shown in Table 3.

Table 3: Differences in the incidence of sequelae between the two groups after 3 months of treatment [n(%)]

Group	Number of cases	Incidence of sequelae
Control group	45	9(20.00%)
Observation group	45	2(4.44%)
χ^2	/	9.6517
p	/	0.0000

4. Discuss

Herpes zoster, an acute viral disease caused by the varicella-zoster virus, usually presents as a painful rash along the ganglia. The virus can lie dormant in the ganglia for many years after an initial infection, such as chickenpox, until it is reactivated when the body's immunity decreases, causing herpes. It is characterized by banded erythema, blisters and scabs along the nerve direction on one side of the body, accompanied by severe pain, and the elderly are the most common group, partly due to the natural decline of immunity with age^[8]. Epidemiologically, shingles occurs globally and is closely related to age, especially in older people over 50 years of age. It is estimated that about 10 to 20 percent of people will develop shingles during their lifetime. As the trend of population aging intensifies, the incidence of shingles is expected to rise further, posing a major challenge to public health. In addition, pain, skin lesions, neuralgia and other symptoms seriously affect the quality of life of patients, making them a health problem that needs attention^[9].

In this study, by comparing the application effect of personalized care and conventional care in elderly patients with herpes zoster, the results showed that the personalized care group was superior to the control group in pain control, mood improvement, edema regression, skin healing and reducing the incidence of neuralgia, with significant statistical differences. These findings not only highlight the importance of personalized care in pain management and emotional support, but also demonstrate its effectiveness in promoting skin healing and preventing the development of neuralgia^[10]. The main reason for the remarkable effect of personalized care is that it has a deep understanding of the individual differences of patients, including the severity of the disease, pain perception, psychological state and life background, so as to provide more accurate and meet the needs of patients. For example, in pain management, by accurately assessing the degree of pain of patients and combining their personal preferences, selecting the most appropriate analgesic strategy, such as drug therapy combined with physical therapy, can more effectively control pain^[11]. In terms of emotional support, personalized care provides a space for patients to express their worries and emotions by establishing a trusting relationship, which helps to reduce psychological pressure and improve the overall emotional state of patients^[12].

In the face of elderly patients with shingles, the uniqueness of each patient should be fully considered, and more personalized nursing measures should be taken to achieve better treatment effects and improve the quality of life. In addition, in view of the significant effects of personalized nursing, it is recommended to further explore and improve specific strategies and methods of personalized nursing in future nursing practice and research. To provide more quality and efficient nursing services for elderly patients with shingles.

References

- [1] Lin Rui, Yang Jingsui, Gao Ning, XU Guofang. Effect of pain nursing management in elderly patients with postherpetic neuralgia during drug therapy [J]. *Chinese Journal of Drug Abuse Prevention and Control*, 2024, 30(01): 27-29+33.
- [2] Zhang Xiaolang, Liao Yuping, Zhang Daying, Liu Weichen, Wang Zhijian, Wan Lu, NING Yumei, WEI Jianmei. Analysis of influencing factors of sense of life meaning in patients with postherpetic neuralgia based on random forest model [J]. *Journal of Military Nursing*, 2023, 40(12): 55-59.
- [3] Zhang Rui, Liu Yanpeng, Li Yuan, Li Lei, Warm, Han Xiaoxiao. Qualitative study on pain belief in patients with postherpetic neuralgia [J]. *Chinese Journal of Medical Sciences*, 2023, 13(22): 141-145.
- [4] Kong Shuling, Zhou Ping, Hu Fengming. Effect of sequential rehabilitation nursing combined with heat-sensitive moxibustion therapy in patients with herpes zoster [J]. *Journal of Qilu Nursing*, 2023, 29(22): 59-61.
- [5] Wang Na, Zhou Ming. Effect of nerve block combined with comprehensive nursing on postherpetic neuralgia [J]. *Chinese Journal of Medical Sciences*, 2023, 24(11): 110-112.
- [6] Lin Mei, Li Lichun, Liu Zhuhui. Effect of humanistic care in nursing patients with postherpetic neuralgia [J]. *Chinese Community Physician*, 2023, 39(29): 140-142.
- [7] Huang Yihan, Zhao Yaling, Wu Huimin, Jiang Yan, Xie Yunfang. Nursing care of a patient with congenital deaf-mute

- postherpetic neuralgia complicated with massive skin ulcer [J]. Chinese Medical Cosmetology,2023,13(10):85-87.*
- [8] GUO Xiaoli, Zhang Li, ZHANG Minmin, Dai Xuehui, Ma Jiayun, SUN Yunzhong, Zhang Ying. *Application of Internet in continuous care of patients with postherpetic neuralgia [J]. Chinese Journal of Pain Medicine, 2023,29(10):779-782.*
- [9] You Haiying, Zhou Yulan, Wang Yajing. *Effect of programmed pain nursing intervention on pain and quality of life in patients with postherpetic neuralgia [J]. Famous Doctor,2023,(19):132-134.*
- [10] GENG Hui, Yang Zhilan, Duan Lizhen, Cao Xiaoxia, Liu Shunfang, Yan Zhili, LIU Xingyu. *Summary analysis of best evidence for nursing management of post-herpes zoster neuralgia in elderly people [J]. Nursing Practice and Research,2023,20(17):2596-2603.*
- [11] Priyadarshini Shantala, Remitha K, Priyanka S. *Ayurvedic management of co-infection of Herpes zoster ophthalmicus in COVID-19 patient: A case report[J]. Journal of Ayurveda Case Reports,2021,4(2):44-49.*
- [12] Porter Allison M., Fulco Patricia Pecora. *Impact of a pharmacist-driven recombinant zoster vaccine administration program[J]. Journal of the American Pharmacists Association,2020,61(2).*