

Exploring the Application Effect of Personalized Nursing in the Nursing of Patients with Alzheimer's Disease

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Abstract: Objective: To explore the role of personalized nursing in the care of patients with Alzheimer's disease. **Methods:** A total of 134 patients with Alzheimer's disease who were treated in our hospital from January 2016 to November 2018 were randomly divided into two groups. The patients in the control group were given routine care, and the patients in the experimental group were treated with personalized nursing; and then observation and comparison were given to the conditions, quality of life, incidence of adverse events and differences in quality of care of the two groups. **Results:** The daily living ability of the experimental group (26.71 ± 3.55) was significantly lower than that of the control group. The intelligence status (22.43 ± 2.54) and quality of life (28.99 ± 2.79) was significantly increased ($P<0.05$). The incidence of adverse events in the experimental group 17.91% was significantly lower than the control group ($P<0.05$); in the experimental group, the quality of care (96.72 ± 1.29), safety care (95.63 ± 2.41), infection control (93.43 ± 3.12), basic care (94.21 ± 2.19) and ward management (94.56 ± 2.45) were respectively significantly higher than that of the control group ($P<0.05$). **Conclusion:** Applying personalized nursing to patients with Alzheimer's disease can improve their living ability and quality of life, improve their mental status, reduce the incidence of adverse events, and improve the quality of care. It is worthy of promotion and application.

1. Introduction

Alzheimer's disease is a common clinical disease, which is a slow-onset brain neurodegenerative disease with high incidence and directly affects the normal life of patients; the clinical manifestations of patients include intelligence decline, decreased judgment, memory loss, and so on; now there is no specific drug for the treatment of senile dementia in the clinic at present, and a family is generally suffer e burden if there is a patient with Alzheimer's disease^[1-3]. According to relevant literature^[4], the treatment effect and quality of life of patients with Alzheimer's disease can be greatly improved if they can accept proper nursing intervention. This paper discussed the nursing plan by grouping the patients with Alzheimer's disease admitted to our hospital, as shown in the following part.

2. Data and methods

2.1 Clinical data

134 patients with Alzheimer's disease who were treated in our hospital were grouped randomly. There were 37 male patients 30 female patients in the experimental group, and they are aged between 60 to 85 years old, with an average age of (73.59 ± 7.42); they had suffered from the disease for 1 to 10 years, and the average course of their disease was (3.69 ± 0.53) years. There were 39 male patients and 28 female patients in the control group, and they are aged between 61 to 86 years old, with an average age of (74.02 ± 6.85); they had suffered from the disease for 1 to 11 years, and the average course of their disease was (3.69 ± 0.53) years. The inclusion criteria: approved by the Ethics Committee, patients were voluntarily involved in the signing of informed consent and the clinical diagnosis met the diagnostic criteria for Alzheimer's disease^[5]. Exclusion criteria: patients have serious medical diseases, malignant tumors, poor compliance, severe organic diseases, cognitive

disorders caused by other diseases, history of drug abuse, liver and kidney system diseases, etc.^[6]. There were no significant differences in the above conditions between the two groups ($P > 0.05$).

2.2 Methods

Both groups of patients were treated with routine care, including dietary guidance, medication guidance, life nursing, etc. The experimental group was given additional personalized nursing intervention, which mainly included the following aspects^[7-9]. 1. Overall assessment. The nursing staff communicated with the patients' family, assisted the patient in the examination, and systematically evaluated the patients' physical condition, psychological condition, and cognitive ability in combination with the examination results. 2. Development of a nursing plan. The nursing staff developed a personalized care plan for each patient based on the overall evaluation results, and provided comprehensive and detailed care services for the patients to minimize their sufferings. 3. Psychological care. Patients with Alzheimer's disease are unstable and are prone to adverse emotions, which often affects the treatment effect. In this study, the nursing staff gave the patients care and comfort to relieve their bad mood, providing a sense of security for the patient and thereby preventing the disease from worsening. 4. Rehabilitation training. The nursing staff guided the patients to conduct life ability training, cognitive training and physical training to create a warm and comfortable treatment environment for the patients. At the same time, they carried out cognitive training based on the characteristics of each patient's personality and performed joint and muscle exercise according to the tolerance of each patient, so as to improve their ability of body coordination and enhance their body immunity; proper massage was given to patients when they had pain symptoms. In addition, patients were encouraged to participate in entertainment activities that were designed for them to train their language function, memory and hearing ability. 5. Nursing after hospital discharge. In the daily care, the nursing staff gave health guidance to the patients and their families, so that their family members could master in risk factors, diet and medication management in daily life. After discharge from the hospital, the nursing staff conducted regular telephone follow-up to grasp the changes in the condition of patients and offered treatment guidance combined with their actual situation.

2.3 Observation index

The ADL was used to evaluate patients' living ability in daily life; the higher the score, the worse the patient's living ability^[10]. The MMSE was adopted to evaluate the patients' mental status; the higher the score, the better the patient's cognitive ability^[11]. QOL-AD was used to evaluate the quality of life of patients; the higher the score, the better the quality of life of the patient^[12]. Adverse events include falls, aspiration, incontinence, acute exacerbations of chronic diseases and improper medication. The assessment items of nursing quality include the quality of nursing record, safety nursing, infection control, basic nursing and ward management; The full score of each item was 100 points; the higher the score, the better the quality of nursing.

2.4 Statistical process

The statistical software SPSS19.0 was adopted for statistical analysis. The measurement data was expressed as ($\bar{x} \pm s$); enumeration data was expressed as n (%) and tested by χ^2 value; the measurement data was tested by t . The differences were statistically significant when $P < 0.05$.

3. Results

3.1 Differences in daily living ability, intelligence status and quality of life between the two groups

Compared with the control group, daily living ability of the experimental group was significantly lower, and the intelligence status and quality of life were significantly improved ($P < 0.05$), as shown in Table 1.

Table 1 Comparison of daily living ability, intelligence status and quality of life

Group	Number of cases	Daily living ability (point)	Intelligence status (point)	Quality of life (point)
Experimental group	67	26.71±3.55	22.43±2.54	28.99±2.79
Control group	67	31.29±4.02	18.03±2.91	25.41±1.83
t		4.291	3.516	2.835
P		0.011	0.016	0.023

3.2 Incidence of adverse reactions in the two groups

The incidence of adverse events in the experimental group was significantly lower than that in the control group ($P < 0.05$), as shown in Table 2.

Table 2 Comparison of incidence of adverse events

Group	Number of cases	Fall (%)	Aspiration (%)	Incontinence (%)	Acute exacerbation of chronic diseases (%)	Improper medication (%)	Incidence of adverse event (%)
Experimental group	67	3(4.47)	1(1.49)	4(5.97)	2(2.99)	2(2.99)	12(17.91)
Control group	67	7(10.45)	3(4.47)	10(14.93)	6(8.96)	5(7.46)	31(46.27)
X^2		4.126					
P		0.013					

3.3 Differences in the nursing quality between the two groups

Compared with the control group, the quality of nursing record, safety nursing, infection control, basic nursing and ward management of the experimental group were significantly improved ($P < 0.05$), as shown in Table 3.

Table 3 Comparison of nursing quality

Group	Number of cases	Quality of nursing record (point)	Safety nursing (point)	Infection control (point)	Basic nursing (point)	Ward management (point)
Experimental group	67	96.72±1.29	95.63±2.41	93.43±3.12	94.21±2.19	94.56±2.45
Control group	67	81.34±1.01	80.21±1.39	77.02±2.47	80.57±1.65	81.08±2.86
t		5.426	4.349	5.746	4.925	4.013
P		0.016	0.025	0.012	0.021	0.017

4. Discussion

Alzheimer's disease is a chronic disease in the elderly. It generally attacks in a relatively inconspicuous way, and its incidence is related to head trauma, family history and physical disease factors; it includes vascular dementia, Alzheimer's disease, mixed dementia, etc. among which Alzheimer's disease is the main style^[13]. Alzheimer's disease has many characteristics, such as long course of disease, high incidence, difficulty in complete cure, and so on. The patient's ability of living and cognition are significantly reduced. Some patients even have complete loss of cognitive ability, intelligence and memory, affecting their normal life and causing economic burden to their family and the whole society.

Alzheimer's disease requires long-term treatment and nursing intervention is also necessary in

the process of treatment. Personalized nursing intervention is a new type of comprehensive and targeted nursing. It carries out nursing intervention from the aspects of disease, psychology and body, promoting the development of treatment. Personalized care can improve the quality of nursing and promote the recovery of patients by mastering the specific conditions of patients and their needs of nursing. Being patient-centered and based on the actual situation of different patient, it formulate personalized nursing plan and brings in psychological intervention and rehabilitation training to ensure the patient's physical and mental health.

This study showed that, compared with the control group, the daily living ability score of the experimental group reduced and the incidence of adverse events significantly decreased; at the same time, the mental status, quality of life and nursing quality significantly improved ($P < 0.05$). In summary, the application of personalized nursing to patients with Alzheimer's disease can improve the life quality and intelligence of patients, reduce the incidence of adverse events and improve the quality of nursing, and thus it is worthy of promotion and application.

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