

The Effects of Whole-course Psychological Care in Patients having Parkinson's Disease with Anxiety

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Abstract: *Objective:* This research explored the clinical effects of the whole course of psychological care in patients having Parkinson's disease with anxiety. *Methods:* Eighty-four patients with Parkinson's anxiety disorder at Hubei No. 3 People's Hospital from January 2020 to December 2020 were randomly selected for this research. They were divided into a control group and a study group using random number table. The control group was provided with routine care while the study group was provided with psychological care in which observation and comparison of clinical effects were carried out. *Results:* There were no significant differences in their scores based on the self-rating anxiety scale (SAS) and self-rating depression scale (SDS) between the two groups of patients before nursing, $P > 0.05$. However, the scores of both, SAS and SDS of the study group after nursing intervention were lower than those of the control group. Sleep quality scores, patient satisfaction, and quality of life scores were all higher than the control group, $P < 0.05$. *Conclusion:* The whole course of psychological care can effectively improve anxiety and depression of patients with Parkinson's anxiety and improve their sleep quality.

Keywords: Whole-course psychological care; Parkinson; Anxiety

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1. Introduction

Parkinson's disease is a common neurological disease in the elderly. Once patients are suffering from Parkinson's disease, they often show clinical symptoms such as mental disorders, loss of intelligence, and sleep disorders. Currently, it is clinically believed that the changes in patients with Parkinson's disease are mainly caused by the degeneration and loss of "black" dopaminergic neurons in the midbrain. The occurrence of the disease has a certain relationship with factors such as heredity, environment, and oxidative stress.^[1] In recent years, research has continuously explored and found that most patients with Parkinson's disease have a certain degree of anxiety which causes serious effects on the patient's physical health and may even endanger their mental health. Therefore, timely treatment of patients with Parkinson's disease in combination with psychological nursing intervention on anxiety plays an extremely important role. Based on this, this research explored the effects from the clinical application of whole-course psychological nursing.

2. Materials and methods

2.1. Basic information

A total of 84 patients with Parkinson's anxiety disorder in Hubei No. 3 People's Hospital were randomly selected from January 2020 to December 2020 as research subjects. The inclusion criteria were patients that had met the criteria for Parkinson's disease after confirmation from clinical examination and diagnosis, patients that showed anxiety related symptoms, patients that had not taken any anti-anxiety drugs recently,

as well as patients that had voluntarily signed the informed consent form which was reviewed and approved by the ethics committee of the hospital. The exclusion criteria were patients with severe mental illness and cognitive impairment, disorders of vital organs in the body, and patients who refused to cooperate with the intervention. The patients who met the inclusion criteria were grouped via a completely randomized design, and random number table was used to randomize the grouping. First, numbers were assigned to the research subjects. If the last digit was a single digit, patients were placed in the study group whereas if the last digit was a double digit, they were placed in the control group. There were 42 patients in each group. In the control group, the male to female ratio was 25:17, age ranging from 61 to 74 years old with an average age of 67.21 ± 1.25 years old, the shortest course of disease was 1 year whereas the longest was 3 years with an average of 1.12 ± 0.13 years. In the study group, the male to female ratio is 26:16, age ranging from 62 to 73 years old with an average of 67.34 ± 1.24 years old, the shortest course of disease was 1 year whereas the longest was 2 years with an average of 1.07 ± 0.11 years. The patients' data were analyzed by a statistical software and no significant differences were found ($P > 0.05$).

2.2. Method

The control group received routine nursing care whereas the study group received interventions such as psychological counseling and health knowledge education. The research team conducted the whole process of psychological care: ① Individualized psychological care. Nursing staffs were required to understand the patients' basic information in detailed combined with patients' relevant information and to carry out targeted psychological nursing interventions to help in patients' negative and unhealthy emotions in order to improve their psychological state.^[2] ② Comprehensive psychological care. In terms of emotional psychological care, nurses were required to actively and enthusiastically welcome patients. They had to maintain an amiable attitude, treat patients with care as family members, and help meet various requirements of patients as much as possible in order for patients to have sufficient trust in cooperating with various psychological care tasks. Secondly, to understand the cause of nursing care, the nursing staffs had to understand the source of the patients' anxiety, other negative emotions, and at the same time, understand their thought process and state while promptly correcting wrong cognitions and carrying out psychological health education to promote the maintenance of a positive and optimistic attitude among patients in facing their disease. Finally, appropriate nursing methods had to be selected in combination with specific situations of each patient. They were required to understand the patients' advantages, help them to explore and discover their own advantages, and organize group activities to build up their confidence and positive energy. ③ Other psychological nursing therapies including music therapy, hypnosis counseling, and drug therapy. In music therapy, related music were played. The use of music in this therapy was to encourage patients to sing and dance in order to alter their psychological mood, and at the same time under the influence of music rhythm and timbre, etc., patients' nervous system would be affected. Hypnosis counseling therapy involved the use of hypnosis to help patients enter a state of sleep so that their psychology would be maintained in a relaxed state in addition to regulating their mood and improving sleep quality. Drug therapy was used by nursing staffs to guide patients in taking psychiatric drugs. However, this therapy required strict adherence to doctors' advice to avoid adverse situations.

2.3. Evaluation

The improvement of anxiety and depression among the patients were observed and evaluated using the Self-Rating Anxiety Scale (SAS) and Self-Rating Depression Scale (SDS) with a cut-off value of 50. The higher the scores, the more serious the anxiety or depression.^[3] The Sleep Quality Scale and the Quality of Life Scale were used to observe and evaluate the improvement of sleep quality and quality of life among

patients. The score had a total of 100 points. The higher the score, the better the sleep quality and quality of life.

The satisfaction of patients with the nursing care was determined using the hospital's self-made satisfaction questionnaire. The questionnaire had a total of 100 points and was divided into three levels. If the evaluation score exceeded 90 points, it belonged to the first level indicating very satisfied. If the range was 70-90 points, it belonged to the second level indicating basically satisfied. If the score was less than 70 points, it belonged to the third level indicating dissatisfied. Total satisfaction = (very satisfied + basic satisfaction) / total number of cases × 100%.^[4]

2.4. Statistical analysis

The data were processed and analyzed using Statistical Package for the Social Sciences (SPSS) version 23.0 software. The data were expressed as ($\bar{x} \pm s$) and (%) in which t-test and chi-square (X^2) were used for testing. $P < 0.05$ indicated that the statistical data had differences.

3. Results

3.1. Improvement of mental state

According to the statistics, there were no significant differences between the mental status scores of the two groups before nursing, $P > 0.05$. After nursing, the mental status of the two groups improved. The SAS and SDS scores of the study group were lower than those of the control group, $P < 0.05$.

Table 1. Statistics of mental status score ($\bar{x} \pm s$, points)

Group	n	SAS		SDS	
		Before care	After care	Before care	After care
Control group	42	53.27±2.35	41.64±2.12	52.39±2.45	40.17±2.05
Test group	42	53.18±2.41	37.25±2.07	52.41±2.39	36.13±1.94
t		0.1733	9.6019	0.0379	9.2765
P		0.8629	0.0000	0.9699	0.0000

3.2. Improvement of sleep quality and quality of life

According to the statistics, there were no significant differences in the scores between the two groups of patients before nursing, $P > 0.05$. After nursing, the quality of sleep and quality of life of the two groups of patients significantly improved. The scores of the control group were lower than those in the study group, $P < 0.05$.

Table 2. Statistics of sleep quality and quality of life scores ($\bar{x} \pm s$, points)

Group	n	Sleep quality score		Quality of life score	
		Before care	After care	Before care	After care
Control group	42	61.25±3.42	65.42±3.58	71.25±3.28	75.84±3.97
Test group	42	62.19±3.51	70.34±4.03	72.41±3.56	79.41±4.05
t		1.2431	5.9151	1.5530	4.0795
P		0.2174	0.0000	0.1243	0.0001

3.3. Patient satisfaction

The satisfaction questionnaire showed that the satisfaction of the study group with the nursing care was higher than that of the control group, $P < 0.05$.

Table 3. Statistics of patient satisfaction with the nursing care (%)

Group	n	Very satisfied	Basically satisfied	Dissatisfied	Total satisfaction
Control group	42	14	19	9	75.57
Test group	42	16	24	2	95.23
X ²					5.1258
P					0.0235

4. Discussion

Parkinson's disease is a progressive chronic disease of the nervous system. There is currently no effective or thorough treatment plan for the disease. Under normal circumstances, patients often have anxiety disorders, pessimism, depression, and other serious psychological emotions. Even suicidal behaviors occur among these patients and greatly impact their physical and mental health, hence reasonable interventions need to be carried out.^[5]

According to related studies, the application of whole-course psychological care plays an extremely important role in the intervention of patients with Parkinson's anxiety disorder. The whole-course psychological care effectively uses medical psychology theories as its basis, promotes active communication with patients, and can improve patients' behavior as well as their psychological state. This changes the nursing method. In nursing care, there is a need to first understand the actual situation of the patients to formulate a targeted psychological care plan. Then, nursing care can be provided from all aspects of the patients and finally, cooperating multiple nursing interventions such as music therapy, hypnotherapy, and drug therapy in order to help patients overcome their negative emotions, improve their quality of sleep, and ultimately control the development of the disease so as to improve their quality of life and promote rapid recovery^[6-7].

Based on the results in this research, the anxiety and depression of the patients in the study group after nursing intervention significantly improved. The quality of sleep, quality of life, and patient satisfaction were also higher than those of the control group. There were significant differences in the comparison between the groups.

In summary, the whole course of psychological care can effectively improve the psychological mood of patients having Parkinson's disease with anxiety disorders, and significantly improve their sleep quality as well as their quality of life.

Disclosure statement

The author declares no conflict of interest.

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