**Research Article** 



# Effect of Continuous Nursing on Quality of Life of Patients with Diabetes Mellitus

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Abstract: Objective: To analyze the effect of continuous nursing on the quality of life of patients with diabetes. Methods: From August 2019 to August 2020, 76 patients with diabetes were selected and randomly divided into group A and group B. group a received continuous nursing and group B received routine nursing. Results: The compliance of health education in group A was better than that in group B (P < 0.05); The score of quality of life in group A was better than that in group B (P < 0.05); The scores of anxiety and depression in group A were better than those in group B (P < 0.05); The nursing satisfaction of group A was 97.37%, which was better than that of group B 76.32%, *P* < 0.05. *Conclusions:* Continuous nursing for patients with diabetes can improve the quality of life, relieve anxiety, depression and other negative emotions, and improve nursing satisfaction.

**Keywords:** Diabetic patients; Continuing care; Quality of life; Influence

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Diabetes mellitus is a common metabolic disease in clinic. Its typical feature is hyperglycemia, which is mainly related to insulin secretion disorders or defects. The human body is in a state of hyperglycemia for a long time, which can damage various tissues and organs, and then cause dysfunction. So far, the etiology of diabetes and effective treatment drugs have not been identified in clinic, so long-term drug intervention is needed after the onset of diabetes, but some patients have limited cognition of diabetes, which leads to poor blood glucose control after discharge and affects the prognosis. Therefore, it is extremely important to implement efficient out of hospital nursing intervention<sup>[1]</sup>. In this paper, 76 cases of diabetic patients were selected as samples to explore the application value of continuous nursing. The report is as follows.

### 1 Material and methods

#### **1.1 Information**

From August 2019 to August 2020, 76 cases were randomly divided into two groups. In group A, there were 21 males and 17 females, aged from 41 to 70 years, with an average of  $(57.89 \pm 0.63)$  years;Group B received routine nursing, including 20 males and 18 females, aged 40-69 years old, with an average of  $(58.14 \pm 0.64)$  years old.The patients with heart and liver diseases and cognitive impairment were excluded.The ethics committee approved the study. Compared with 76 patients, P > 0.05.

### 1.2 Methods

Group a received continuous nursing. (1) A continuous nursing group was established, including head nurses and primary nursing staff, and a targeted guidance manual was developed based on the actual situation of patients<sup>[2]</sup>. (2) Regular telephone follow-up was carried out to master the diet, exercise and knowledge of patients after discharge, urge patients to control blood sugar, improve their nursing compliance, enhance their health knowledge cognition, and inform them of the return visit time. At the same time, telephone was reserved to adjust the follow-up frequency in combination with the blood sugar fluctuation of patients<sup>[3]</sup>. (3) The health education manual should be created for diabetic

patients after admission, including department introduction, doctor introduction, responsible nurse introduction, and contact information of relevant personnel. At the same time, the targeted life guidance should be given according to the patient's own condition, which can improve the trust between nurses and patients. (4) Regular exchange meetings will be held for patients with diabetes. Patients with good blood glucose control will talk about their cognition of diabetes, including daily blood glucose control methods, how to maintain a happy mood, diabetes treatment plan, etc. <sup>[4]</sup>. (5) Create wechat group, carry out diabetes health explanation regularly, and professional medical staff can answer patients' doubts, popularize relevant knowledge, improve patients' cognition of diabetes, encourage patients to communicate and exchange daily protection experience with each other. Patients with doubts can be consulted directly through wechat group, and medical staff can master patients' daily care through wechat group situation.(6) Regular door-to-door follow-up, the responsible nurse should regularly follow-up the nursing staff, guide the patients to correctly use the blood glucose meter, at the same time, inform the daily precautions, strengthen the health education, give targeted psychological intervention and medication intervention, so as to

improve the patients' self-protection awareness and ensure stable blood glucose<sup>[5]</sup>.

Patients in group B received routine nursing, heart rate, blood glucose, body weight, respiration and ECG were examined to provide routine clinical nursing.

### 1.3 Statistical study

SPSS 33.0 was used to calculate the data of patients with diabetes and depression, and%,  $\bar{x} \pm s$  were used to record the count and measurement indexes of patients with diabetes during diagnosis and treatment. The data differences between groups were tested by  $\chi^2$  and t test. P < 0.05, the data can be compared.

### 2 Results

### **2.1** Comparison of health education compliance differences

The compliance of blood glucose monitoring (94.74%), reasonable diet (92.11%), moderate exercise (97.37%) and correct medication (89.74%) were significantly improved in group A after continuous nursing. Compared with the indexes of blood glucose monitoring (73.68%), reasonable diet (68.42%), moderate exercise (71.05%) and moderate exercise (62.79%) in group B, P < 0.05. See Table 1.

**Table 1.** Difference analysis of health education compliance among groups (n, %)

Blood glucose monitoring	Reasonable diet	Moderate exercise	Correct medication
36 (94.74)	35 (92.11)	37 (97.37)	34 (89.74)
28 (73.68)	26 (68.42)	27 (71.05)	25 (62.79)
6.3333	6.7279	9.8958	6.1376
< 0.05	< 0.05	< 0.05	< 0.05
	36 (94.74) 28 (73.68) 6.3333	36 (94.74)         35 (92.11)           28 (73.68)         26 (68.42)           6.3333         6.7279	36 (94.74)         35 (92.11)         37 (97.37)           28 (73.68)         26 (68.42)         27 (71.05)           6.3333         6.7279         9.8958

### **2.2** Comparison of quality of life scores between groups

After continuing nursing, the scores of quality of life

**Table 2.** Quality of life score difference analysis table (score,  $\bar{x} \pm s$ )

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 Mental health
 Emotional function

 Physiological function

Group name	Social quality	Mental health	<b>Emotional function</b>	Physiological function	Somatic function
Group A $(n = 38)$	84.51±2.47	85.46±2.51	87.69±2.84	88.25±2.97	86.79±2.84
Group B ( $n = 38$ )	71.46±2.16	70.94±2.32	72.47±2.17	73.41±2.74	74.62±2.42
t	24.5169	26.1873	26.2503	22.6388	20.1063
Р	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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## **2.3** The scores of anxiety and depression were compared between the two groups

The scores of anxiety  $(30.14 \pm 1.85)$  and depression  $(31.75 \pm 1.75)$  in group A were better than those in

group B (40.19  $\pm$  2.14) and (41.62  $\pm$  2.13), P < 0.05; Before nursing intervention, the scores of anxiety and depression in group A and B were compared, P > 0.05. As shown in Table 3.

in group A were significantly improved, compared with the data in group B, P < 0.05. As shown in Table

Table 3.

Group –	Anxiety score (points)		Depression score (points)	
	Before nursing	After care	Before nursing	After care
Group A $(n = 38)$	52.68±2.47	30.14±1.85	50.49±2.58	31.75±1.75
Group B ( $n = 38$ )	52.78±2.51	40.19±2.14	50.51±2.61	41.62±2.13
t	0.1751	21.9006	0.0336	22.0709
Р	>0.05	< 0.05	>0.05	< 0.05

### 2.4 Analysis table of nursing satisfaction between groups

Group a received continuous nursing intervention,

nursing satisfaction was 97.37%, group B received routine nursing intervention, nursing satisfaction was 76.32%, P < 0.05. As shown in Table 4.

Table 4. Difference analysis of nursing satisfaction between groups (n,%)

Group name	Satisfied	<b>Basically satisfied</b>	Dissatisfied	Satisfaction
Group A $(n = 38)$	26 (68.42)	11 (28.95)	1 (2.63)	97.37
Group B ( $n = 38$ )	23 (60.53)	6 (15.79)	8 (21.05)	76.32
$\chi^2$	-	-	-	6.1758
Р	-	-	-	< 0.05

### **3** Discussion

In recent years, people's living habits and eating habits have been changing. The incidence rate of diabetes has been increasing year by year, which seriously affects the quality of life of patients. So far, no specific therapeutic drugs have been developed in clinic. In addition to the characteristics of long course, many complications and complex condition of diabetes, long-term medication and pain affect the physical and mental health of patients. Therefore, improving the quality of life and treatment compliance of patients with diabetes is still a hot topic in clinical research<sup>[6]</sup>. In the conventional nursing mode, the nursing work is limited in the hospital, and the nursing is interrupted after the patient is discharged, which is not conducive to the long-term control of blood glucose. In recent years, with the deepening of clinical research on diabetes, continuous nursing has been gradually applied in clinic. The nursing scheme mainly aimed at patients after discharge can help patients correct bad living habits, improve patients' cognition of diabetes and their confidence in overcoming the disease, so as to improve the prognosis of patients.Under the continuous nursing mode, regular follow-up can help patients master their own disease changes and strengthen daily nursing knowledge<sup>[7]</sup>. During the actual implementation of extended nursing intervention, through the establishment of extended nursing group, combined with the patient's own condition to develop nursing guidance manual, it is conducive to provide targeted nursing; Through regular telephone follow-up, the patient's condition progress after discharge can be mastered, and the nursing compliance can be improved; Through regular follow-up, targeted medication intervention and psychological intervention were given to improve their self-protection awareness, relieve the negative emotions of patients, and improve their treatment and nursing compliance<sup>[8]</sup>. Combined with the analysis of this study, after the continuous nursing intervention, the nursing compliance of group A was significantly improved, the scores of various quality of life were significantly improved, the negative emotions of anxiety and depression were relieved, and the nursing satisfaction was as high as 97.37%, compared with the data of group B, P < 0.05. It is suggested that continuous nursing intervention for patients with coronary heart disease and depression can improve the self-care ability of patients, which has clinical promotion value.

In conclusion, continuous nursing for patients with diabetes can improve the quality of life of patients, enhance the compliance of treatment and nursing, and alleviate negative emotions, with significant effect. However, the sample data included in this study is less, and the observation time is short. Therefore, in order to explore the medium and long-term effect of continuous nursing for patients with diabetes and its impact on the quality of life and negative emotions of patients, it is necessary to increase the number of samples, extend the research time, and carry out further research.

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