Research Article



Health Management of Patients with Type II Diabetes and its Influence on Chronic Complication

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Abstract: Objectives: To explore the application of health management in patients with type II diabetes and to analyze and compare the incidence of chronic complications. *Methods:* the relevant research work was carried out in our hospital. During September 2018 to September 2019, 100 patients with type II diabetes were randomly divided into two groups: one group was given routine nursing intervention, the other group was given health management, and they were named control group and experimental group respectively. Each group had 50 patients, the influence of different nursing methods on the incidence of chronic complications in patients was explored. Results: In the one-year followup results, the corresponding complications of patients mainly include cardiovascular disease, kidney disease, cerebrovascular disease, fundus disease and peripheral neuropathy. The incidence of complications in the experimental group is 10.00%, while that in the control group is 32.00%. in comparison, the incidence in the experimental group is lower, and the data difference between the two group is $small(P \le 0.05)$, which exists significance. Conclusion: The application of health management method in type II diabetes has significant effect, which can reduce the incidence of chronic complications, improve the quality of life of patients, and has positive significance for clinical development.

Chronic complications; Impact effect

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Diabetes is a common clinical symptom, and most of the patients are type II diabetes, most of which occur in the elderly patients. As for diabetes, it belongs to a lifelong disease, which needs long-term treatment and intervention. At the same time, the patient's own disease will also have a negative impact on the incidence of chronic complications, which is not conductive to effective improvement the life quality of patients, has a greater impact on the economic pressure and burden of patients, and needs to improve the attention of patients^[11]. The study is based on this, to explore the application of health management methods in patients and the effect on patients by comparing the incidence of complications of patients under different nursing methods.

1 Data analysis and method research of patients

1.1 General information

Keywords: Type II diabetes; Health management;

Relevant research works was carried out in our

hospital from September 2018 to September 2019. A total of 100 patients was selected, all of whom were patient with type II diabetes, and they were divided into two groups. One group was given routine nursing intervention and the other group was given health management. They were named as the control group and experimental group respectively. Each group has 50 patients. Among them, there were 65 male patients and 35 female patients, of which the old one is 69 years old, and the young one is 38 years old, and the average age of patients was (54.45±3.45) years old. Meanwhile, the course of the patients was 5-24 months, and the corresponding average course was (9.22±3.45) months. The possibility of special medical history, severe liver and kidney injury and infectious diseases were excluded. There was no significant difference between the two groups (P > 0.05), so that comparison among groups can be carried out.

1.2 Research methods

Give the patients blood glucose control, mainly blood glucose control drug, which taking orally. And on this basis, give the experimental group of patients with diabetes health management, the specific implementation methods are as bellow: The specific content of health management program includes behavior intervention, health information collection and health promotion. Health management information collection: To understand and clarify the current health condition of patients, record the existing clinical symptoms of patients, observe their medication, understand the family history, liver and kidney function, fasting blood-glucose, electrocardiogram, exercise and diet structure of patients, and observe the chest X-ray abdominal.

Diabetes health promotion and behavior intervention: It mainly includes four parts: First give the patients basic knowledge of diabetes, which needs the nursing staff to explain the definition of diabetes, the causes of diabetes, the clinical manifestations of patients, the main methods of treatment, the possible complications of patients, etc., improve the patients' awareness of their own diseases, and pay attention to strengthen the fasting blood glucose, 2-hour postprandial blood glucose and to understand the normal value of glycosylated hemoglobin. Meanwhile, it is necessary to clarify the influence of various factors on patients' blood glucose, especially the related factors and dangers related to the occurrence of diabetic complications, strengthen the cognition of diabetic complication, make effective prevention, promote the patient's treatment compliance and improve patient's cognition of self-care. The second one is the knowledge of diet control. It clarify the patients' commonly used food calories, analyze the relationship between hypoglycemic drugs and diet for the patients, ensure the patients to improve their diet awareness, adapt scientific eating methods, ensure the nutrition balance, match the diet, and calculate the patients' calories in combination with the height, weight and other indicators of patients, so as to help the patients choose a proper diet. The third one is rational drug use. Give the patients health education, endure that patients has a clear cognition of the impact of drugs on the development of disease and are able to insist medication, ensure the rationality of drug use, and avoid the situation of random drug discontinuation. At the same time, it is necessary to inform the patients of possible adverse reactions of commonly used drugs taken by the patients, inform the patients of prevention measures, and reduce the incidence of adverse reactions of the patients. At the same time, there is a certain relationship between the time of taking medicine and the result of diet. It is necessary to regularly observe the fasting condition of patients, and monitor the postprandial blood sugar of the patient, so as to ensure the effective adjustment of drug use and selection according to the actual situation of patients, and ensure the effectiveness of drug. Finally, exercise. It is necessary to develop appropriate activities based on the patients' preferences and according to the actual physical conditions of patients, inform the importance of exercise to physical recovery to the patients, ensure patients' active cooperation, improve patients treatment compliance, and promote the effective improvement of life quality of patients.

1.3 Observation target

Systematic health management was carried out for two groups of patients for one year, and then the diagnostic criterion of related diseases were applied, as well as the five contents of patients including kidney disease, cardiovascular disease, cerebrovascular disease, fundus disease and peripheral neuropathy was diagnosed and concluded.

1.4 Statistical methods

Using spss 20.0 as a tool, the data in this study were analyzed statistically, the comparison results of measurement data ($\bar{x} \pm s$) were verified by t-value, and the comparison results of count data (n, %)

were verified by χ^2 -value. When the results showed P < 0.05, the difference between groups has statistically significant^[2].

2 Results

In the one-year follow-up results, the corresponding complications of the patients mainly included

cardiovascular disease, kidney disease, cerebrovascular disease, fundus disease and peripheral neuropathy. Among them, the incidence of complications in the experimental group was 10.00%, and that in the control group was 32.00%. In the comparison, the incidence of experimental group was lower, and the data difference between patients in the two group was small (P<0.05), so it has significance.

Table 1. Comparison of diabetic complications between the two groups [n(%)]

Group	Cardiovascular disease	Cerebral vascular disease	kidney disease	Fundus diseases	Peripheral neuropathy	Incidence rate
Experimental group (n=50)	2(4.00)	1(2.00)	1(2.00)	0(0.00)	1(2.00)	5(10.00)
Control group ($n = 50$)	3(6.00)	3(6.00)	4(8.00)	2(4.00)	4(8.00)	16(32.00)
χ^2						13.305
Р						< 0.05

3 Discussion

Diabetes is easy to occur with a variety of complications at the same time, especially for the incidence of cardiovascular complications , the corresponding incidence rate is relatively high^[3]. Among them, the high incidence of chronic diabetic complications is mainly due to the abnormal metabolism of the patients. In the early stage of diabetes, the diabetics show strong insulin resistance, lipid metabolism disorder and increased blood viscosity, and all kinds of factors that caused medium-sized atherosclerosis. At the same time, with the age of the patients gradually increasing, the extent of atherosclerosis in the arteries of the patients increase, and what cause atherosclerosis is high risk factor for the incidence of chronic complications of diabetes, and is the basic pathology of related diseases. Its effect factors are closely related to lifestyle and behavior pattern of people^[4]. Therefore, it will cause adverse effects on the lifestyle of diabetic patients, so it is necessary to intervene the risk factors of patients' behavior in the actual work process, which is also the main way of comprehensive treatment of diabetes and the key factor to avoiid complications^[5].

Diabetes is a common disease in department of endocrinology. The patients' course of diseases is relatively long. The onset rate of patients is faster. From the perspective of recent year development, the incidence of diabetes gradually moves towards younger age, and the corresponding treatment difficulty of this disease is relatively difficult. Under the longterm treatment of patients, patients are prone to recurrent problems. And in the process of treatment, it is also easy to show anxiety, depression and other adverse emotions. In addition, it is difficult to take medicine on time according to the doctor's advice, improve bad living habits and so on, resulting in the aggravation of the patient's condition, or inconstancy, leading to the occurrence of various complications, causing serious adverse effects on the patient^[6]. In this study, patients were given targeted health education, and the results showed that: In the one-year followup results, the corresponding complications of the patients mainly included cardiovascular disease, kidney disease, cerebrovascular disease, fundus disease and peripheral neuropathy. Among them, the incidence of complications in the experimental group was 10.00%, and that in the control group was 32.00%. In the comparison, the incidence of experimental group was lower, and the data difference between patients in the two group was small ($P \le 0.05$), so it has significance. Diabetes is a common clinical symptom. Most of the patients are type II diabetes, which occurs in the elderly patients most. As for diabetes, it belongs to a life long disease, which needs long-term treatment and intervention. At the same time, the patient's own disease will also have a negative impact on the incidence of chronic complications, which is not conductive to the effective improvement of patient's life quality, has a great impact on the economic pressure and burden of patients, and needs to paid more attention to patients. The results of this study show that the implementation of diabetes health education can improve patients' awareness of the diabetes system, promote patients'

awareness of health management, improve patients' awareness of systemic diseases, strengthen patients' health management, and improve patients' blood glucose control level, including blood glucose and postprandial blood glucose. At the same time, it is necessary to expand the education scope of diabetes, strengthen the cognition of the above-mention system health management interventions, reduce the incidence of diabetes complications, improve the poor living habits of patients, ensure the life health of patients, and promote the effective improvement of the quality of life of patients^[7]. The clinical significance of this health management method in the intervention of diabetic complications is more significant, and its clinical application is more significant^[8]. However, in the actual development, if we further strengthen the effectiveness of health assessment, ensure the health management mode, promote its standardization, in order to return visit and effective assessment tracking, we still need to carry out in-depth development in the future.

In conclusion, the application of health management method in type II diabetes has significant effect, which can reduce the incidence of chronic complications, improve the quality of patients' life, and has positive significance for clinical development.

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