

Clinical application analysis of continuing nursing in nursing service for diabetic patients

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Abstract: The research is to establish a Continuing Nursing Project after discharge which conforming to the actual conditions of our country and explore whether such Continuing Nursing Project could effectively improve therapy compliance and blood glucose control of diabetic patients. Methods: mainly analyzing pathological mechanisms of diabetic patients and exploring the clinical effect and the complication after implementing Continuing Nursing to patients. Results: after implementing Continuing Nursing, the diabetic patients could be better at controlling their diet, the drug usage rate and exercise rate have been improved significantly, complication rate have been decreased and the clinical effect is remarkable. Conclusion: the application of Continuing Nursing in the nursing service for diabetic patients, which could effectively improve living quality and clinical symptoms of patients, deserves to be popularized.

Keywords: Continuing nursing, diabetes, nursing, clinical effect.

INTRODUCTION

Diabetes Mellitus, referred to “DM”, is one of the clinical common diseases. The pathogenesis of such disease is generally fallen into 2 categories: one is genetic factor, and the other is environmental factor. The symptoms are polydipsia, polyphagia, polyuria, weight loss or hypodynamia and weight gain. The patients which suffer from such disease need lifelong treatment generally, and will suffer huge pressure physically and psychologically. Recently, the prevalence rate of diabetic patients increased year by year. According to the survey of WHO, the amount of diabetic of the entire world will be 330 million in 2025 (Qin, 2014). Therefore, choosing a feasible way to prevent and control DM is extremely urgent. In this article, diabetic patients were treated by Continuing Nursing and which had gotten an obvious treatment effect. Presently reports as follows.

MATERIALS AND METHODS

Continuing Nursing Methods

In this paper, all the diabetic patients have gotten Continuing Nursing on the basis of conventional treatment, and the details of the treatments to the patients are: 1. providing mental nursing before discharge, 2. providing medicine nursing before discharge, 3. explaining the DM knowledge to the patients at fixed period, 4. measuring blood glucose for the patients at fixed period, 5. making scientific exercise plans, 6. providing health and rational diet instruction. More details are shown as below:

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Providing mental nursing before discharge: nursing staffs shall communicate with patients by using encouraging and comfortable words, pay close attention to their psychological condition, listen sincerely to their psychological and physiological feelings, and conduct psychological counseling aiming at patients' condition, help them with releasing negative mood and keeping positive living attitude (Shi 2014).

Providing medicine nursing: in the treatment of diabetic patients, most patients need medicine therapy, that the most commonly used is insulin therapy. When giving nursing service, nursing staff shall give patient drug intervention. Medical staff shall contact with the patients and explain price and effect of medicines before taking the medicines, and shall urge the patients to take the medicines timely and quantitative, and they shall not fail to follow doctors' advises and taking the medicines irregularly (Wei 2013).

Explaining the DM knowledge to the patients at fixed period: community health workers shall gather the patients and explain the DM knowledge to the patients periodically, and shall establish specific health consulting center for explaining to the patient timely and conveniently. What's more, the health consulting center shall provide relevant therapy methods such as medicine treatment, exercise treatment and diet treatment, in accordance with different clinical manifestations and complications of the patients (Gong 2013).

Measuring blood glucose for the patients at fixed period: medical staffs shall measure blood glucose for the patients

periodically, record data at each time and adjust medicine policy and nursing plan according to the blood glucose condition. Regarding the old diabetic patients with bad compliance, medical staffs shall require their families to appear on the scene and conduct health education to their families so that which could assist the patients in medicine, diet and exercise. Meanwhile, medical staffs shall tell the patients' families how to deal with acute events (Xiang 2013).

Making scientific exercise plans: medical staffs shall make scientific and detail exercise plans for the patients in accordance with the state of illness, blood glucose and family condition thereof, so that improving their endocrine function. When choosing exercise plans, aerobic exercise shall be in the first place as possible, and step by step and keeping perseverance shall be followed; the exercise time shall be arranged at 90 min after having meal as possible, and limited in 30-60 min. Medical staffs shall urge the patients to carry candy and helping card with themselves.

Providing health and rational diet instruction: community health works shall calculate the daily calories needed by the patients in accordance with their weight, height and level of activity, and rationally distribute the 3 main nutritions. Meanwhile, medical staffs shall urge the patients to keep away from tobacco and alcohol, and to eat more fresh vegetable and fruit, and to comply with the principles of More Meals Less Food and More Food Less Rice. And medical staffs shall instruct the families of patients how to control patients' daily sugar amount of radiation and eating less Starchy food as possible (Li 2015).

The 4 weeks telephone follow-up after discharge: nursing staffs shall make totally 3 times telephone follow-up, once respectively at the 3rd to 7th day, the 17th to 28th day and the 24th to 28th day, after each diabetic patient was discharge (Yuan, 2015). Provided that after the 1st telephone follow-up, the patient had a bad therapy compliance in which there are many problems, one more telephone follow-up shall be made at the 2nd week (during the 8th to 14th day). The materials collection after discharge is shown as fig. 1.

Operation steps of continuing nursing

The Operation flow chart of Continuing Nursing is shown as fig. 2.

Several issues shall be noted about diets of diabetic patients

There are five attentions to the diet of diabetes patients. One specialist suggested that, diabetes patients shall: control diet, control the total calories, establish a dietary structure and choose the diversified and reasonable nutritional food increase the intake of vitamins and minerals, drink more water, limit alcohol, control blood glucose by green health diet and shall not regard non-sugar food as dependable source of food. The issues shall be noted about diets of diabetic patients is shown as fig. 3.

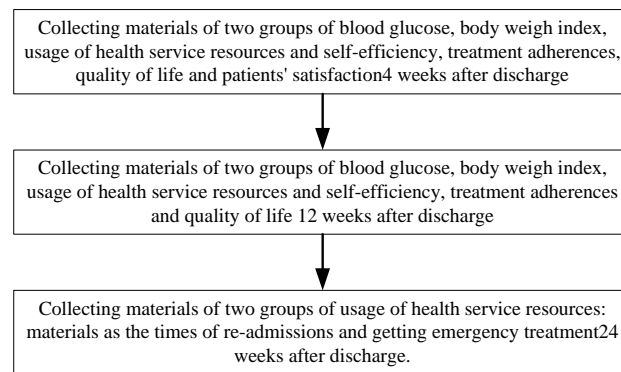


Fig. 1: Materials collection after discharge.

RESULTS

From table 1, after Continuing Nursing, the patients' awareness of the reasons, symptom and treatment of hypoglycemia was remarkably strong than before, and the difference was statistically significant. The rate of complications after treatment is shown as fig. 4.

DISCUSSIONS

In recent years, the incidence of DM presents a gradual upward trend in China. One remarkable clinical characteristic of such disease is that the patient has a high blood glucose which cause great bodily harm to the patient and could pose great threat to the patient's life. DM is a life-long chronic disease. Once the patient had it, the possible to be completely cured is little, and the possible to cause other complications is high. Therefore, it is necessary to provide diabetic patients health education and nursing, in which Continuing Nursing includes health education, diet instruction, mental nursing, medicine

Table 1: Awareness of hypoglycemia before and after nursing (%)

	Number	Reasons of hypoglycemia		Symptom of hypoglycemia		Treatment of hypoglycemia	
		Not Mastered	Mastered	Not Mastered	Mastered	Not Mastered	Mastered
Before	116	80	36	66	50	50	65
After	116	0	116	0	116	0	116

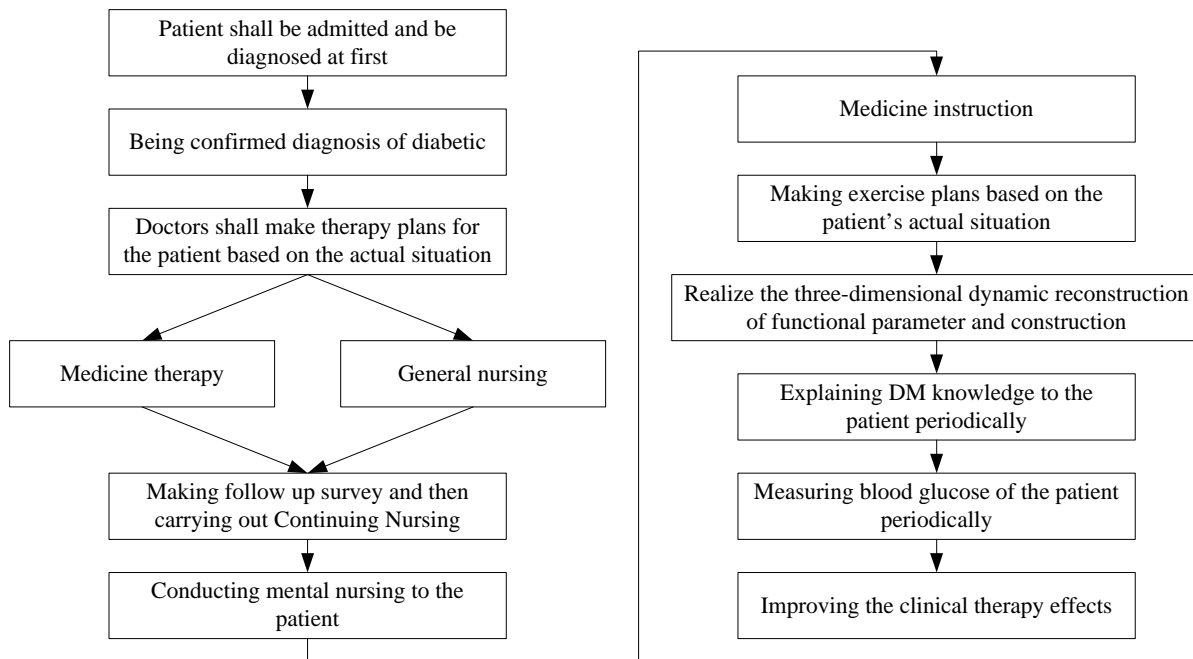


Fig. 2: Operation flow chart of continuing nursing.

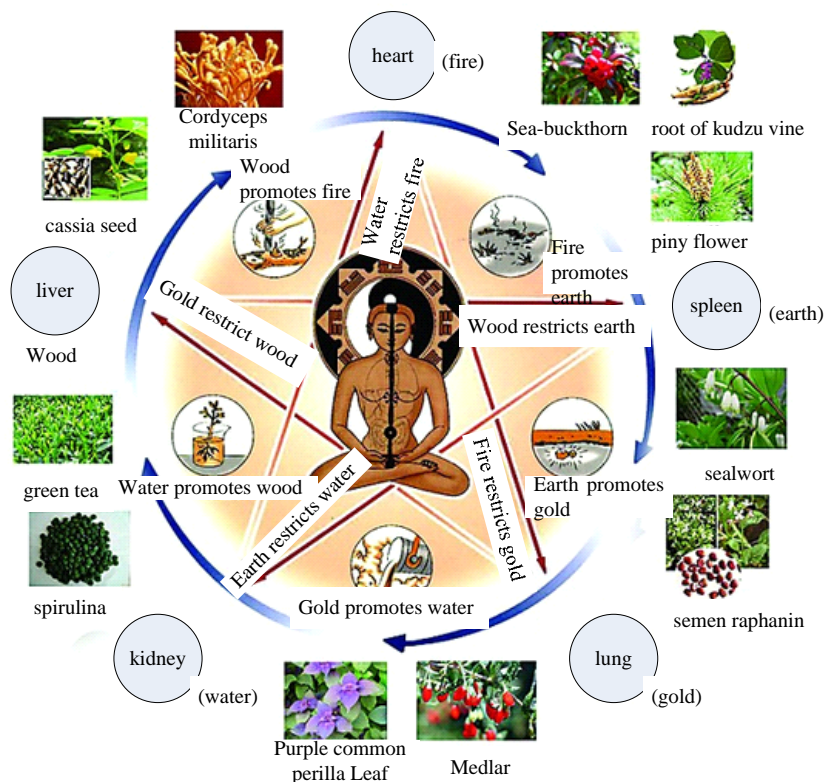


Fig. 3: Issues shall be noted about diets of diabetic patients.

nursing and exercise nursing, and nurses need to give careful nursing to patients' daily life to control the disease. A scientific continuous nursing scheme needs to be formulated, of which the content should be implemented

in aspects of health education, diet instruction, mental nursing, medication care, and exercise care. Moreover, nurses should take good care of patients' daily lives and control their diseases. It was reported that, the onset of

DM is related to people's living habits, living environment and family heredity. Clinical treatment focuses on decreasing the complications incidence and improving the blood glucose of patients, and sets the improvement of biochemistry index as a standard of evaluating therapeutic effect, while Continuing Nursing could not only improve the biochemistry index of patients, and also their life quality.

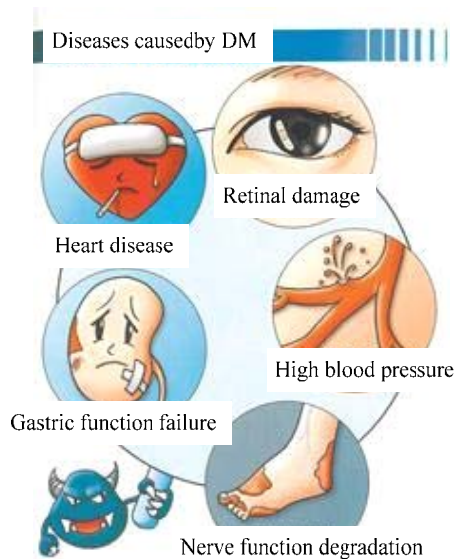


Fig. 4: Common complications after traditional treatment.

In treatment, the proportion of patients who only take oral medication is 39.66%, and who use insulin treatment is 60.34%. Type 2 DM is a chronic disease for life, and along with the course extension, islet cell function could gradually drop. The treatment effect of most patients will be diminished and the dependency of patients to controlling methods of exogenous blood glucose will increase gradually, after a period of single-agent oral therapy. In clinical practice, oral medication needs to be used in combination. If the combination of different type of oral medicines still cannot effectively control blood glucose, the therapy of insulin injections or combined with oral medicines is needed. On insulin therapy, effective nursing treatment could improve the clinical effect of patients.

Continuing Nursing is a new nursing method, which transfer patients from acute to sub acute stage or from hospital to home, and is a nursing service which could improve the security of such transfer period and ensure that patients could receive timely care. Conventional wisdom holds that it means the end of hospital service after discharge, and patients could only get continuing medical service by subsequent visiting; while Continuing Nursing is the extension of hospital nursing, and satisfies the health requirements of patients after discharge, by telephone follow-up, family visiting, telephone consultation, short message and internet, for purposes of

improving self management to the disease, promoting health and reducing re-hospitalization. In the 1980's, America started to use Continuing Nursing on the patients after discharge, and then developed a series of research regarding Continuing Nursing, including the prognoses of elderly patients with chronic heart disease, elderly patients with heart failure and diabetic patients, which diminished the usage of emergency treatment and readmission rate and saved medical expenses. In accordance with a published study about Continuing Nursing after discharge by Wu *et al.* (2012), it could get good results of controlling blood glucose, treatment compliance and saving medical costs, by Continuing Nursing for discharged diabetic patients as nurses leading.

In conclusion, after Continuing Nursing, the diabetic patients could be better at controlling their diet, the drug usage rate and exercise rate have been improved significantly, complication rate have been decreased and the clinical effect is remarkable. Therefore the application of Continuing Nursing in nursing service for diabetic patients, which could effectively improve living quality and clinical symptoms of patients, deserves to be popularized

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