Study on the Comprehensive Management Mode of Diabetic Patients under the Mode of Medical Care Combined with Old-age Care

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Abstract. Diabetes is a chronic disease with a high incidence rate. In the context of health care in China, an intelligent monitoring system combining medical care with old-age care has been established based on the service model of combining medical care with old-age care, in view of the reality of diabetes patients, while accurately and effectively identifying the nursing problems of patients with diabetes, a scientific and reasonable individualized nursing plan will be formulated, and the relatively limited nursing resources will be fully utilized, to improve the quality of nursing care for the aged with diabetes mellitus. Based on the model of medical care combined with old-age care, combined with diabetes patients, a comprehensive management model was put forward.

Keywords: Combination of medical care and nursing care, old-age service mode, diabetes patients, comprehensive management mode.

The combination of medical care and nursing care is a kind of old-age service with Chinese characteristics. With the rapid development of population ageing and aging in China, the combination of medical care and nursing care has emerged as the times require. The combination of medical care and nursing care is a combination of medical care institutions and old-age care institutions. Old-age care resources are integrated into medical care resources, the new service mode of medical care, nursing care, health care and nursing care is to meet the needs of the elderly and to provide continuous care for them.

1 Background of the research on the service mode of the combination of medical care and old-age care

At present, the rapid development of the population ageing not only brings heavy burden to the society and the family, but also puts forward higher request to the social medical level and service. China's elderly population has a large base, a rapid growth and a significant aging trend, coupled with changes in family structure and large population mobility, which has led to a significant increase in the demand for elderly care and medical services, in particular, the number of patients with subacute stage, end-stage patients, respiratory care needs are numerous. In 2017, WHO issued guidelines on integrated care for the elderly in the community and guidelines on assessment and intervention pathways for integrated care for the elderly in the community. In April 2019, the State Council General Office issued an
opinion on advancing the development of old age services, which pointed out that promoting the high quality development of old age services, including enhancing the capacity of medical and Nursing Combined Services, we will promote the integrated development of old-age care at home, in communities and in institutions.

Medical care combined with old-age service mode is compared with the traditional mode of old-age care. It is a fine tradition of the Chinese nation to provide for the aged. At present, there are several types of medical-care combination models in China: first, medical institutions are set up in old-age institutions; second, old-age institutions are set up in hospitals; Fourth, the medical institutions to the old-age and medical services to combine the direction of transformation; fifth, the community home old-age service institutions and medical institutions to establish a cooperative mechanism. These models have their own advantages and disadvantages, so it is necessary for the builders of medical institutions and medical workers of the elderly to explore and innovate in practice.

The new "combination of medical care and old-age care" model is based on the above-mentioned traditional old-age care model, with the help of various resultant forces such as institutional mechanisms, participation forces, scientific and technological support, etc., with the participation of professional nursing team, general practitioners, rehabilitation doctors and medical institutions, we will provide professional medical services for the disabled, the mentally retarded and the elderly to improve their quality of life, in order to achieve the "disease treatment, non-disease health care" of the old-age model. In the new model, it specifically includes the contents of "medicine", "health care", "maintenance" and "Nursing", "medical" refers to medical services, health advisory services, health examination services, disease diagnosis and treatment services, "health" refers to serious illness rehabilitation services; "Yang" refers to life care services, mental and psychological services, cultural activities services, etc.; "Nursing" refers to nursing services, palliative care services, etc. . Prevention and Treatment Combined Services, actively promote community medical care and care for the aged. Combined with the construction of embedded community service facilities for the elderly, the joint establishment of Community Health Service stations, with medical care services as the main function, to provide medical services such as seeking medical care and dispensing, chronic disease management and family sickbeds for the care-giving elderly, and to carry out targeted health services combining prevention and treatment for the elderly in the community, promoting the organic combination of community medical care service and old-age care service. Family doctors sign contracts to extend community geriatric health services. The new service mode of "combining medical care with nursing care" takes "medical care + rehabilitation + Nursing + old-age care" as the main line, and carries out targeted care and health management to the residents according to the level of need nursing, a model for the provision of convenient and effective comprehensive services that integrate life care, cultural entertainment, health care, spiritual comfort, emergency relief and palliative care for the elderly.

2 The challenge of diabetes management in China

Diabetes self-care is challenging, and education alone is not enough to help people with diabetes build confidence, motivation, and skills for self-management, a combination of program education, counseling, and skills training is required to enable patients to acquire and maintain self-management skills, including practical problem-solving skills and coping skills, over a period of time, then repeat the training courses to improve their self-management skills and self-efficacy.
2.1 Complications of diabetes

The high complication rate of diabetes in our country causes great damage to the health of the residents, and causes heavy burden of disease to the society, second only to cardiovascular disease and tumor. The diabetes patient suffers from the cardiovascular disease probability to be higher than non-diabetes 2-3 times, the diabetes research institute result indicated that the diabetes patient because of overweight brings the high blood fat is the important reason which produces the cardiovascular disease; People with end stage renal disease are 10 times more likely to have diabetes than those with early stage renal disease, and diabetic retinopathy affects a third of people with diabetes, the leading cause of vision loss in adults. Complications due to poor blood sugar control are an important cause of disability in patients with type 2 diabetes. The Glycated hemoglobin is the gold standard for blood sugar control, according to a large randomized trial of diabetes complication control (DCCT) in the United States, strict control of blood glucose close to the normal level can effectively control the occurrence and development of diabetic complications.

2.2 Treatment of diabetes

As a metabolic disease, hyperglycemia is seen as the tip of the iceberg in metabolic disorders, and patients with type 2 diabetes mellitus (T2DM) are often associated with other metabolic syndromes, such as hypertension, dyslipidemia, obesity, and so on, these combined diseases make T2DM complications of the risk, speed of development and harm significantly increased. For people with Type 1 diabetes, a healthy lifestyle can be achieved through proper daily insulin treatment, regular monitoring of blood sugar, a healthy diet and a regular lifestyle, delay or avoid many of the complications associated with diabetes. While a healthy lifestyle is the cornerstone of treatment for type 2 diabetes, including a healthy diet, increased physical activity, smoking cessation programs and maintenance of a healthy physical quality, so far, the cause of type 2 diabetes is not fully understood and can not be cured, requiring patients to follow medical advice throughout their lives. Every year, about one-third of the diabetic patients in our country develop gradually and produce all kinds of acute and chronic complications due to lack of basic knowledge of diabetes, failure to take active treatment measures or improper treatment, such patients usually have a low level of disease-related knowledge, poor self-management ability, poor compliance with medication, affect blood sugar control effect, need to be supplemented with good health education.

3 The comprehensive management mode of diabetic patients under the mode of medical care combined with old-age care

The elderly patients are the mainstream of diabetes. Because of the increasingly prominent problems of the elderly, the transformation of the old-age service institutions and the integration of various resources has become a general trend. As a result of the huge change of people's life style and diet structure as well as the increasing life pressure and other factors, more and more people are suffering from diabetes, the incidence of diabetes remains high. In order to further improve the elderly diabetic care, we need to actively integrate into the medical care model.

3.1 Continuum of care model

The integrated management model of diabetes patients under the mode of medical care
combined with old-age care practice the concept of holistic medical care and continuous care, the technology of discharge preparation service (the core technology of continuous medical service) is applied to improve the quality of medical service and facilitate the smooth transition from hospital to community and back to family. The medical care ward carries out the evaluation of the discharge preparation of the admitted patients, selects the high-risk patients, provides the discharge preparation service before and after the discharge of the patients, and establishes the working procedure of discharge preparation service, the contents include: Comprehensive Evaluation of patients (post-admission, pre-discharge and post-discharge follow-up) ; multi-disciplinary team participation in the preparation of discharge plan; full communication with patients and their families to improve the quality of care during hospitalization; Health education and caregiver training were conducted to guide the self-care knowledge and skills needed after discharge from the hospital, and seamless handover was completed in cooperation with the contracted doctors in the community health center, so that the community medical care extended to home care.

3.2 Family-based participatory tele-care model

With the development of network technology, remote management based on network has become the trend of continuous nursing. But at present, most of type 2 diabetes patients are middle-aged and old, their education is not high and their hearing and vision are generally decreased. The supervision and support given by family members in diet, medication and exercise can greatly promote the rehabilitation of patients with diabetes. The family participation type long-distance nursing model is the union family support and the network long-distance nursing merit, may fully enhance the diabetes patient's self condition management ability.

3.3 The health belief model

Health belief model is a theoretical model to explain health-related behaviors by using social psychological method. From the perspective of HMB, people's behavior is determined by their beliefs about disease and behavior, that is, when people feel threatened by disease, the benefits and barriers of accepting behavior are likely to lead to behavior. Until now, integrating diabetes management self-efficacy into HBM. The older the patients were, the worse their self-management behavior, and the strongest predictor of self-management behavior was self-management efficacy, suggesting that the patients with high self-management efficacy had better self-management behavior.

3.4 Multi-disciplinary joint diagnosis and treatment, all-round management model

The general management clinic for Type 1 diabetes includes a combination of diabetes specialists, diabetes educators, nutrition, exercise rehabilitation, ophthalmology and psychology. The diabetes specialist is responsible for assessing blood sugar control, assessing growth and development, adjusting treatment regimens, and answering questions. The nutrition division is responsible for calculating the daily energy intake, which is converted into the intake of various foods; conducting dietary surveys and assessments for three consecutive days; and conducting dietary education on diabetes and addressing the problems in the diet of patients, dietary and nutritional advice is given and patients are provided with individualized and nutritious meals. The rehabilitation department is responsible for exercise assessment, cardiopulmonary function assessment, assessment of bone and joint conditions, exercise prescription. The psychological department is
responsible for the evaluation of the emotional state of the patients and their family members, and the evaluation of the cognitive function of the patients. Ophthalmology is responsible for diabetic retinopathy screening. The diabetes educator is responsible for the establishment of patient files, long-term follow-up, evaluation of treatment results, evaluation of patients' self-management ability, individualized education based on the evaluation results; Check the insulin injection site and so on.

3.5 Diabetes support group model

The effectiveness study of the group of diabetic friends was mainly based on the intervention study of Educational Support Group. Based on the support group of patients, the intervention of self-management plan was designed, and the effect of self-management plan was followed up after 12 weeks and 24 weeks respectively, improving diet knowledge and skills, exercise and self-monitoring behavior can improve group leader's ability, and improve patients' quality of life in general. In addition, an intervention study was conducted to design a self-management program for type 2 diabetic patients, the results showed that there were significant differences in HbA1c, fasting blood glucose, body mass, diabetes cognition and health belief between the participants and non-participants. The self-efficacy and depression of the patients can be improved by using the support group model of the diabetic patients and the intervention of the support group, hba1c, cholesterol level and quality of life were improved.

4 Conclusion

At present, diabetes is prevalent in the whole world, and it has become one of the main diseases that cause death and disability. Under the guidance of the mode of combining medical care with old-age care, through the integration of prevention and medical and health resources, to establish and improve a working mechanism and service system for the prevention and treatment of diabetes mellitus with clearly defined responsibilities, orderly connection, cooperation and interaction between disease prevention and control institutions and medical and health institutions, actively establish a data management system for diabetes patients, build a "medical prevention and integration" to manage diabetes in the whole process, implement a "prevention-intervention-treatment" comprehensive system, and explore an intelligent management model for diabetes, improve the health status of patients with diabetes.

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