
The impact of strengthening chronic disease management outpatient services on the prognosis of coronary heart disease patients

Fan Wang

Chengdu Medical College

Abstract: Objective: To evaluate the impact of strengthening chronic disease management outpatient services on medication adherence, cardiovascular event readmission rate, and cardiac function rating in patients with coronary heart disease. Method: From January 2012 to December 2013, 180 patients diagnosed with coronary heart disease who visited the Cardiovascular Department of the First Affiliated Hospital of Chengdu Medical College were divided into a strengthened management group and a general management group (control group). The strengthened management group will follow up every 2 weeks through standardized chronic disease management outpatient methods, and undergo regular testing every 3 months. The general management group will follow up through monthly outpatient or telephone visits. Observe medication adherence, readmission rate of cardiovascular events, and cardiac function rating (NYHA rating) in two groups of patients. Result: After 2 years of follow-up, it was found that in the strengthened management group, aspirin/clopidogrel (74% vs. 54%, $P < 0.01$)、The medication rates of statins (69% vs. 46%, $P < 0.01$), ACEI/ARB (76% vs. 46%, $P < 0.01$), and beta blockers (63% vs. 42%, $P < 0.05$) were all higher than those of the general management group; The readmission rate due to cardiovascular events is also relatively low (26% vs. 42%, $P < 0.05$). Conclusion: Strengthening standardized management of coronary heart disease patients can help improve medication compliance and reduce the readmission rate of cardiovascular events.

Keywords: Coronary artery disease; Disease management; prognosis

In recent years, with the increase of risk factors, the incidence rate of coronary heart disease in China has increased year by year. Although drugs and surgical treatment are very advanced and have reached the international level, the disability and mortality rate of coronary heart disease in China is still rising significantly due to economic factors or patients' lack of awareness of the disease. Coronary heart disease is one of the chronic diseases that require long-term or even lifelong treatment. Therefore, exploring a comprehensive chronic disease management model for coronary heart disease patients is of positive significance in improving their quality of life and reducing the burden of national health economics. This study focuses on patients with clearly diagnosed coronary heart disease and observes the impact of standardized chronic disease management outpatient services on medication adherence, readmission rate of cardiovascular events, and cardiac function rating (NYHA rating) through regular follow-up and testing of coronary heart disease patients.

1 Object and Method

1.1 Subjects

180 patients diagnosed with coronary heart disease through coronary angiography who visited our department from January 2012 to December 2013. All patients comply with the "Recommended Naming and Diagnostic Standards for Coronary Heart Disease" developed by the International Society of Cardiology and the World Health Organization (WHO) Naming Standards Joint Task Force. All patients have independent behavioral abilities and sign informed consent forms. Exclusion

criteria: ① Those who lack communication skills or do not cooperate in joining the study and conducting relevant follow-up; ② Patients with malignant tumors or severe respiratory diseases. According to the patient's wishes, they were divided into a strengthened management group (n=100) and a general management group (control group, n=80). The strengthened management group: patients were followed up at the hospital every two weeks. Follow up content: Inquire about the patient's condition in the outpatient department, provide medication guidance, receive health education, review blood pressure, blood lipids, blood glucose, electrocardiogram every 3 months, and re evaluate cardiac function. Review the echocardiography every 6 months and adjust the treatment plan in a timely manner based on the examination results. General management group: Outpatient or telephone follow-up will be used, with one follow-up every month. Patients will be asked about their condition every three months, and any cardiovascular events will be recorded. Self testing or hospital monitoring of blood pressure, blood sugar, and lipid levels will be conducted. Re evaluate cardiac function, observe medication adherence, and readmission rate for cardiovascular events.

1.2 Research Method

All patients were recorded with baseline data such as age, gender, blood pressure, blood lipids, blood glucose, electrocardiogram, echocardiography, heart function rating, and medication use, and followed up for 2 years. Follow up period: From January 2012 to December 2013, a total of 24 months.

In 2012, the American Heart Association Foundation, Heart Association, Physicians Association, Thoracic Surgery Association, Cardiovascular Preventive Care Association, Cardiovascular Angiography and Intervention Association, and Thoracic Surgeons Association jointly launched the Diagnosis and Treatment Guidelines for Stable Ischemic Heart Disease. The new guidelines proposed a new plan for follow-up of patients with stable coronary heart disease, recommending that these patients be evaluated at least once a year, including assessing symptoms and clinical heart function status, electrocardiogram examination, detection of certain complications (such as heart failure, arrhythmia, etc.), control of risk factors, and adherence to lifestyle and medication changes. As a Class I recommendation, patients with stable ischemic cardiomyopathy should have an individualized education program that optimizes treatment and promotes health, including education on the importance of adhering to medication for symptom management and delaying disease progression; Explain medication treatment and strategies for reducing cardiovascular disease risk in a way that respects the patient's level of understanding, reading ability, and race; Fully explain all treatment options; Stable ischemic heart disease patients should be educated to follow lifestyle key points that may affect prognosis: controlling body mass; Blood lipid management; Blood pressure control; Quit smoking and avoid exposure to secondhand smoke.

McAlister et al. conducted a randomized trial in 2001 to systematically evaluate the level II prevention of coronary heart disease, and concluded that strengthening the management of coronary heart disease can improve the diagnosis and treatment process, reduce hospitalization rates, and improve patient function

State and quality of life. Wu Jinhui et al. conducted outpatient intensive management on patients with coronary heart disease over 65 years old in China. After one year of follow-up, they found that the proportion of drugs recommended in the guidelines for outpatient intensive management group patients was significantly higher than that of the general management group; The proportion of readmission for cardiovascular events was significantly lower than that of the general management

group; And its quality of life rating is also better than that of the general management group. Zhong Yigang et al. conducted standardized and strengthened management of coronary heart disease patients in Hangzhou for nearly 2 years, resulting in a decrease in the readmission rates of all-cause mortality, cardiogenic mortality, and cardiovascular events.

The original intention of the Coronary Heart Disease Intensified Chronic Disease Management Clinic is to regularly evaluate coronary heart disease patients and prescription drugs. Due to the requirement of regular follow-up every two weeks, it plays a role in strengthening management and regular health education for patients. This study found after a 2-year follow-up of patients with coronary heart disease who underwent enhanced management that the outpatient group participating in enhanced chronic disease management had better medication rates for aspirin/clopidogrel, statins, ACEI/ARB, and beta blockers than the general management group; The readmission rate due to cardiovascular events is also relatively low; Although the improvement in cardiac function rating was not significantly better than that of the general management group, it may be related to the fact that there were more severe coronary heart disease patients in the reinforcement group at baseline, and the cardiac function rating was biased towards subjective factors of patients, requiring further evaluation through other survey questionnaires such as quality of life scores.

Reference:

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