

The Influence of Social Support and Coping Style on Drug Treatment Compliance of Hypertension Patients in Community

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Abstract: To explore the influencing factors and Countermeasures of drug treatment compliance of elderly hypertensive patients in community. The author used the self-made questionnaire on medication compliance of hypertensive patients to conduct a random questionnaire survey on hypertensive patients managed by community hospitals. The results showed that the specific reasons for the poor compliance of hypertensive patients with drug treatment were mostly because the patients forgot to take medicine because of poor memory, and stopped taking medicine because of the normal blood pressure relief of conscious symptoms. The patients thought that it was unnecessary to take medicine because of the mild symptoms, and that the blood pressure could not be alleviated after taking medicine. Therefore, it leads to the relatively poor compliance of drug treatment in hypertensive patients with hypertension in the district. The older the age, the lower the education level, the more the medications, the more medications, the worse the medication compliance. Influencing factors are related to health education guidance, thereby improving medication compliance, improving treatment outcomes, and improving prognosis.

1. Introduction

Essential hypertension is one of the most common cardiovascular diseases and an important risk factor for other cardiovascular diseases such as stroke and coronary heart disease [1]. Among them, the patient's poor medication compliance is an important reason for the patient's blood pressure not being effectively controlled [2]. The first cause of death in 2004 was cerebrovascular disease, and hypertension was the first risk factor for total death [3]. There are 200 million hypertensive patients in China, and about 3 million people die from cardiovascular disease each year, half of which are related to hypertension [4]. Treatment compliance means that patients take medications in strict accordance with the doctor's clinical doctor's prescription. Because high blood pressure patients need to take medication for life to control blood pressure, adherence to antihypertensive drugs is the key to treatment [5]. However, some scholars believe that drug treatment compliance directly affects the effect of drug treatment. For hypertensive patients, once they are ill, they need to take medicine for a long time. Good compliance in patient with anti-hypertension therapy (CPAT) is the most effective and economical means to effectively control and reduce complications, and to reduce the incidence and mortality of stroke [6]. The key to effective control of blood pressure depends not only on the correct medication of doctors, but also on the compliance of patients with antihypertensive drugs. Yes, there are few studies on the relationship between CPAT and health service quality in China. Therefore, how to improve the compliance of hypertension patients with antihypertensive drugs has become one of the hot spots in the field of hypertension prevention and treatment.

In recent years, the incidence of hypertension has increased year by year, which has attracted the attention of the community. Medication compliance has become an important branch of hypertension control research in foreign countries. There are few studies on community-based hypertension treatment compliance in China, mainly hospital-based research [7]. Controlling hypertension is the key link to reduce the incidence of cardiovascular and cerebrovascular diseases, and the treatment of hypertension is mainly for drug users [8]. Previous studies have shown that the

compliance rate of antihypertensive drugs in hypertensive patients in China is only 31.20%, and elderly patients with hypertension have lower compliance, which has become an important reason for poor blood pressure control. The blood pressure control rate is the key to reduce the disability and mortality of hypertensive patients. However, the blood pressure control of community hypertension patients is not very optimistic. The awareness rate, treatment rate and control rate of hypertension in Chinese community are still low [9]. Community health is the frontier for primary and secondary prevention of hypertension. The key to community health management is to promote patients to change bad behavioral lifestyles, improve patient compliance, and develop patient self-management skills [10]. It is generally believed that poor CPAT is the cause of high blood pressure not being effectively controlled. In this study, CPAT -related questionnaires were analyzed in elderly hypertensive patients to explore the factors affecting CPAT in elderly hypertensive patients, and suggestions were made to effectively improve the treatment effect of elderly hypertensive patients.

2. Data, methods and results

A face-to-face questionnaire survey was conducted among patients with hypertension who were randomly selected to take medicine in a hospital from February to June 2018. Selection criteria: Age (> 60 years old), in line with the Chinese guidelines for the diagnosis of hypertension (systolic blood pressure (> 140 mm Hg) (1 mm Hg = 0.133 k Pa), or diastolic blood pressure (> 90 mm Hg), excluding secondary hypertension, course of disease (> 1 year). And after at least 2 weeks of antihypertensive drug treatment. Voluntary investigation showed that the patients were conscious and had no cognitive impairment. Exclusion criteria: severe audiovisual impairment, mental disorders or other serious mental disorders, severe heart, liver, kidney and other organ lesions, concomitant with tumors, and received chemotherapy or radiotherapy in the past six months. The method of investigation is to use the self-made questionnaire of hypertension patients' medication compliance, knowledge of hypertension, etc. to formulate the questionnaire. After the expert's examination, select the subjects and complete the investigation. The judging criteria consists of 5 questions, including 1. Can you take the medicine as required by the doctor? 2. Can you take the medicine according to the amount requested by the doctor? 3. Can you take the medicine according to the time required by the doctor? 4. Diagnose hypertension Since then, can you follow the doctor's request for long-term medication without interruption? 5. Is there any interruption and intermittent days during the medication? After the questionnaire is completed, the quality control personnel of the questionnaire will carefully check to ensure that the questionnaire is not missing. Fill in, compare and analyze the difference in the level of each influencing factor between poor medication compliance and compliance.

Univariate analysis was performed on whether the categorical variables affected the treatment compliance and social function of hypertensive patients, regardless of the influence of other factors. The results are shown in Table 1.

Table 1 Univariate analysis of factors influencing treatment compliance in patients with hypertension

Impression factor	X value	P value
Marital status	7.658	0.254
Career	13.513	0.235
Educational level	0.478	0.245
Medical insurance category	0.153	0.796
Gender	0.564	0.245
Management group	40.256	0.654
Blood lipid	19.342	0.369
Complication	12.245	0.478

Relevance analysis of influencing factors of drug treatment compliance in hypertensive patients:

drug treatment compliance as dependent variable. The independent variables were age, marital status, educational level, economic status, course of hypertension, knowledge of hypertension, drug reaction and efficacy of antihypertensive drugs. And multivariate logistic regression analysis. The number of patients with excellent CPAT was less. The specific reasons for poor CPAT are: patients forget to take medication because of poor memory, and stop taking medication because of their conscious symptoms to alleviate normal blood pressure. Patients think it is unnecessary to take medication because of mild symptoms. Patients think that blood pressure cannot be alleviated after taking medication and stop taking medication. The results of the analysis showed that the age, the degree of education, the type of medication, the number of medications, and whether there were complications and whether the regular self-test blood pressure was superior to CPAT, the difference was statistically significant ($P < 0.05$). Gender, age, marital status, education level, family monthly income, combined with other chronic diseases, self-rated health status and self-assessment of health service quality scores were independent variables, and a two-class logistic regression model was introduced. The results showed that age and patient initiative were the influencing factors of CPAT, and the difference was statistically significant. Older patients are older, have less memory, poor cognitive resolution, and more antihypertensive drugs. Older patients are more likely to be confused with drug names, doses, and usage memories, resulting in misuse, missed service, and multiple services.

Management group, constitutional quality, blood lipids and awareness score were the influencing factors of treatment compliance in patients with hypertension, as shown in Table 2.

Table 2 Logistic regression analysis of influencing factors of treatment compliance in patients with hypertension

Influence factor	Beta value	SE	P value	OR value	95%CI
Intercept	7.236	3.654	0.065	7.357	(1. 456, 38. 354)
Management Group	6.365	2.365	0.654	1.365	(1. 489, 64. 351)
Intervention group	1.355	2.795	0.476	1.587	(1. 984, 91. 335)
Body mass index	2.345	0.469	0.468	5.369	(1. 651, 34. 340)
Blood fat	1.256	0.579	0.369	0.489	(1. 365, 28. 335)
Normal	2.369	0.367	0.250	0.369	(1. 189, 48. 354)
Awareness score	0.354	0.125	0.489	0.478	(1. 687, 28. 289)

3. Discuss

Drug treatment compliance refers to whether patients use drugs according to doctor's instructions, which is called compliance, and vice versa, non-compliance. As for its long-term organ protection and metabolic effects, further research is needed. Analysis of factors affecting drug treatment compliance found that the older the age, the lower the educational level, the more types of medication, the more times the medication was taken, the worse the drug treatment compliance. The more patients know about disease-related knowledge, the more self-management consciousness they will have and the more willing they will be to comply with doctor's advice. The compliance of community hypertension patients with drug treatment is generally poor, which is consistent with the results of literature research. The main influencing factors include education level, course of disease, awareness of hypertension, times of taking medicine, social support, payment methods of medical expenses and so on. It may affect the compliance of community hypertension patients with medication, such as education level, course of disease, marital status, etc. Regularly organize knowledge lectures: Guide patients to learn self-care methods, master the correct methods of monitoring blood pressure, and learn to monitor blood pressure levels by issuing cards, individual guidance, and group teaching. Strengthen the hierarchical management of hypertension in the community: establish a good doctor-patient relationship with patients and their families during the follow-up process, and strengthen the information exchange between doctors and patients. Keep abreast of the efficacy and possible adverse reactions of patients taking antihypertensive drugs, and

provide necessary help and guidance to patients.

In view of the above-mentioned influencing factors, it is considered that the following corresponding countermeasures can be taken to improve the compliance of drug treatment in elderly hypertensive patients in the community. Patients with cardiovascular complications have good medication adherence, which implies a phenomenon: many patients are not early in the formal treatment, so primary prevention is a major responsibility. The monthly income per capita of the family shows that the higher the monthly income per household, the better the medication compliance. The general education level of patients is not high, the self-care awareness is weak, and the awareness of the dangers of hypertension is not enough. I don't understand the importance of long-term and regular medication. Therefore, some conscious symptoms relief, or no obvious effect after taking drugs, or can not tolerate adverse drug reactions and stop drugs without authorization. Compared with divorced and widowed patients, married hypertensive patients have companionship, help and encouragement in life, and their social functions are relatively better. Therefore, the propaganda of hypertension knowledge is an important means to improve patients' compliance with medication, which is helpful for patients to attach importance to their own health. The content of education should include basic knowledge of disease, risk factors of disease, blood pressure monitoring, main symptoms, the importance of adherence to medication and treatment, and the importance of life intervention. Collective teaching, individual guidance and card issuance can be adopted. Explain to hypertension patients and their families the necessity of taking antihypertensive drugs and the importance of adhering to long-term medication. Introduce the benefits and possible adverse reactions of antihypertensive drugs to patients.

4. Conclusion

In conclusion, poor compliance with medication is an independent risk factor for adverse cardiovascular events in hypertensive patients. Improving compliance with medication is an urgent problem for community hypertension management. The relationship between medication basis and compliance is good. This shows that community medical service is the key to hypertension prevention. Community doctors should make use of every opportunity for patients to receive health education. Medical staff should explain the name, dosage, usage, possible adverse reactions and Countermeasures of drugs to patients in detail. In this way, the patient's medication safety is improved, and the medication is stopped or less taken because of the inability to tolerate the drug or fear of adverse reactions. In addition, hypertension management should not only pay attention to the education of patients' knowledge level, but also pay attention to the change of their attitudes, so as to stimulate patients' self-management of disease enthusiasm and initiative, and gradually improve patient compliance and social function ability. Only by comprehensively improving various influencing factors can we improve the compliance of drug treatment for patients with hypertension, effectively control blood pressure, reduce the damage of high blood pressure to important organs such as heart, brain and kidney, and improve the survival time and quality of life of patients. In addition, a follow-up plan is prepared for each patient to provide on-site services and family beds for elderly patients with limited mobility, so that patients can deal with problems in a timely manner.

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