Medication Safety Management Among Elder with Hypertensive in Community

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**Abstract.** This paper reviews the research on the safety management of elderly patients with hypertension in the community in China and abroad. The research involves the concept of elderly hypertension and medication safety, the characteristics of patients with elderly hypertension in the community and some problems with the safety management of them in the community. Based on the above-mentioned research results, this paper draws a conclusion that community hypertensive patients must implement effective drug safety management measures and briefly puts forward some suggestions.

1. **Introduction**

Hypertension is a chronic medical condition in which the blood pressure in the arteries is elevated. And it is one of the most important modifiable risk factors for cardiovascular disease and renal disease in Western and Asian populations. According to previous national surveys conducted in China, the prevalence and absolute numbers of hypertension have increased dramatically during the past several decades. It is also a major risk factor of cerebrovascular disease in China and endangers the health of human beings seriously [1,2], which has brought a heavy burden to family and society. The incidence of hypertension is increasing year by year. According to the statistics, currently, there are more than one billion people suffering from hypertension in the world, and China has at least 200 million people with high blood pressure. Moreover, there are about 10 million people increasing each year [3,4]. Nowadays, there is no fundamental solution to high blood pressure, and it still requires long-term medication to control blood pressure. Therefore, the elderly medication safety management has become a hot social concern and it is also a focus problem of elderly social security. The developed countries have done more research on the safety of elderly, which have formed a more mature service and management model. However, according to the researches of medication safety in the elderly, the majority of researchers in China are mainly focus on hospitals, while minority groups pay attention to the community and retirement organization.

2. **The Concept**

Elderly hypertension is the people who are aged over 60 with the systolic pressure is greater than 140mmHg and (or) diastolic pressure is greater than the 90mmHg.

Medication safety is doing comprehensive evaluation and choosing drugs accurately and reasonably according to the patients’ gene, physical condition, prevalence and genetic history and so on, in order to achieve the purpose of safe, reasonable, effective, accurate medication, paying attention to contraindications and drug economic.

3. **The Characteristics of Patients with Elderly Hypertension in the Community**

3.1 **The individual characteristics of the patients with hypertension in the community**

Patients with high blood pressure have low physiological function and poor metabolism. At the same time, the elderly may appear the phenomenon of memory loss, attention deficit and drug misusage caused by complex medicine species dosage [5].
3.2 The characteristics of the drug for the patients with elderly hypertension in the community

At present, drug treatment is still the principal means to control blood pressure [6-8], and some literatures reported that 90% of the patients with high blood pressure can control blood pressure at a safe level by taking drugs [9]. With the rapid development of medicine and pharmacy, new antihypertensive drugs appear constantly. Moreover, compound preparations composition is complicated and there are a variety of combination regimens. Therefore, it is important to select and apply antihypertensive drugs reasonably. According to the research [10], the drug’s adverse effects were increased by 50% and 100% when using five and seven drugs at the meantime.

3.3 Patients with elderly hypertension in the community have a poor adherence to medication

The evidence showed that the adherence to medication adherence is reduced in elderly patients with hypertension. According to the statistics, the adherence rate is 59% for elderly patients, and nearly half of patients cannot take the prescribed medicine. Elderly patients with high blood pressure are not according to the prescription dose and use drug without authorization, which is not only affect drug curative effect, but also affect the physician for the correct evaluation of new drugs or different preparation method. There are many kinds of antihypertensive drugs, but if you want to achieve ideal antihypertensive effect, in addition to follow the principle of certain drugs, there should be a reasonable drug use evaluation system (such as economic evaluation and pharmacodynamics evaluation, etc.), the monitoring of drug safety, the improvement of patients’ medication adherence and hospitals at all levels (health services center) effective regulation of high blood pressure, etc. [11] The interaction between the patient, the doctor and the hospital will promote the rational use of drugs. Most of the results showed that the simpler the treatment, the lower the number of drugs and the frequency of the drug, the better the reduction, the better the compliance.

4. Problems with the Safety Management of Patients with Elderly Hypertension in the Community

4.1 China’s community health service system is not perfect

To a large extent, the elderly medication needs the help and support of family and the medical staff, especially for the empty nest elderly who do not live with their children, and community health services are also needed for help and support. The problems that the coverage of community health service institutions is insufficient, the number of community health service professionals is too small, the community health service is not perfect, and the variety and quantity of drugs are insufficient, have become the major factors affecting the use of drugs among the elderly [12].

In addition, some other factors have seriously restricted the standardized management of community hypertension, such as the lack of community medical resources, the lack of ability of medical staff of the business and residents’ health awareness, the lack of general practitioners, the uneven of community elderly hypertension management mode and contents.

4.2 The knowledge level of drug management in elderly patients with hypertension is low, and the level of drug administration is poor

The diagnosis and treatment level of medical staff is not high, some of the medical staff on blood pressure measurement method, the judgment criteria of high blood pressure, high blood pressure treatment procedures such as the relative lack of relevant knowledge, make many parts of the awareness, treatment and control of hypertension are lower [13], which caused the appearances that the lack of effective management to the community staff and even many unreasonable phenomenon [14].
4.3 Patients with elderly hypertension in the community have poor use of drugs, and reserves of expired and deteriorated drugs

Community of elderly patients with high blood pressure medication delinquency including watch more wrong understanding of drugs, the doctor’s advice, take drugs, fault and the use of expired drugs, etc. The survey found that 91.74% of elderly people are not understand the drugs and 60.74% are not understand the knowledge of adverse drug reactions, said received pharmacist guidelines (21.11%) [15]; the elderly have more disease and more medicine in the home. However, due to poor care and untimely cleaning, the drugs have deteriorated and failed to affect the effectiveness of the drug. Another survey found that 81.9% of the elderly at home have spare drugs, 50.6% of the elderly’s home has expired drugs, and 41.2% of the elderly are deteriorating drugs in the home [16].

5. Summary

Elderly hypertensive patients increased year by year in community, they are prone to adverse drug reactions in the process of self-medication and it has serious impact on their health. Even lead to the waste of medical resources. Therefore, it is necessary to implement effective drug safety management measures for patients with high blood pressure in the community. This paper puts forward four suggestions:

(1) It is necessary to set up geriatric nursing profession and cultivate social practical elderly care talents to meet the needs of social development.

(2) Establish apartment elderly service center, perfect medical services; arrange old people in the elderly residential aged care facilities, such as nursing home.

(3) Establish a scientific and effective indexsystem for medical services. Set up health files, the elderly and medication files and dosage for detailed records for the elderly in the community health centers. Health service personal should visit the patient regular by telephone interviews or face-to-face interviews, especially for the patient who are older, live alone and with poor memory, low cultural level, and provided the medication consultation and guidance for them. And then prevent the irrational use of drugs, perfect the indexsystem for medical services.

(4) Giving health education and health promotion to hypertension patients in communication and enrich their safe medication knowledge.

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References


