



# Investigation of Clinical Pharmacists Participating in Consultation of Elderly Cardiology Patients and Analysis of Typical Cases

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**Abstract: Objective:** To explore the influence of clinical pharmacists' participation on the consultation quality of elderly cardiology patients and to report typical cases. **Methods:** 100 elderly patients admitted to the Department of Cardiology of our hospital from February 2018 to February 2019 were randomly selected as research objects. Clinical pharmacists participated in the consultation, and their consultation opinions were recorded. At the same time, related typical cases were reported. **Results:** The adoption rate of clinical pharmacists' opinions was 85%, with an effective rate of 97.65% (83/85). **Conclusion:** Clinical pharmacists' participation in consultation is conducive to the optimization of the comprehensive level of diagnosis and treatment, and can guide the rational adjustment of drug use methods and doses. This model is worth promoting.

**Keywords:** Clinical Pharmacist; Consultation Work; Adoption Rate; Clinical Value

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The Department of Cardiology, as one of the most significant departments in the hospital, undertakes an important medical rescue task. Therefore, it has become an vital task for medical staff in China to actively explore the diagnosis and treatment in the Department of Cardiology. Relevant statistics show that, with the increasing trend of population aging in recent years, the number of cardiology patients is increasing. Under this background, medical staff have conducted in-depth exploration and analysis on clinical diagnosis and treatment modes to rescue patients in cardiology department, promoting the adjustment of treatment modes in the department. A large number of researches have shown that clinical pharmacists' participation in the consultation process of elderly cardiology patients can help to evaluate the physical condition of patients, ensuring that clinical pharmacists can adjust the drug use plan reasonably accordingly, and laying a solid foundation for improving the safety and rationality of medication for elderly patients. Meanwhile, from the perspective of drug treatment, the participation of clinical pharmacists in the consultation is beneficial to the improvement of drug use, and can promote the treatment safety of elderly patients. Researchers of this study explored and analyzed the influence of clinical pharmacists' participation on consultation work by studying the clinical treatment of a large number of elderly patients in cardiology department, aiming at effectively improving the overall level of consultation work for elderly cardiology patients and laying a solid foundation for improving the comprehensive quality of diagnosis and treatment work in cardiology department.

## 1. Materials and methods

### 1.1 General information

100 patients admitted to the Department of Cardiology of our hospital from February 2018 to February 2019 were randomly selected as the research objects, including 60 males and 40 females, aged from 62 to 75 years, with an average age of  $(66.25 \pm 3.51)$  years. All the research objects and their family members were informed and agreed to the contents of this study, which have been reported to and approved by the Hospital Ethics Committee.

## 1.2 Methods

During the consultation, medical staff should inquire about patients' condition and feelings, and analyze their case data in order to formulate treatment methods effectively and reasonably. The consultation work should be carried out with the participation of clinical pharmacists. Related consultation contents are as follows: clinical pharmacists and medical personnel should cooperate with each other to hold discussions and scientifically analyze and evaluate drug use methods according to the actual situation of patients, so as to effectively carry out diagnosis and treatment work and provide help for protecting patients' health. In this process, clinical pharmacists need to evaluate medication and dosage according to their professional experience, and then give corresponding guidance and suggestions.

## 2. Results

### 2.1 Drugs involved in consultation

Drugs involved in the treatment of elderly cardiology patients mainly include antiarrhythmic drugs, antibacterial agents and antihypertensive drugs. It can be found by analyzing patients' data that hypertension is common in elderly patients, and most patients often need to take drugs for a long time to effectively control related indicators, thus reducing the incidence of cardiovascular and cerebrovascular diseases.

### 2.2 Adoption of clinical pharmacists' consultation opinions

The adoption rate of clinical pharmacists' consultation opinions was 85%, with an effective rate of 97.65% (83/85) (as seen in **Tables 1** and **2**).

**Table 1.** Adoption of clinical pharmacists' consultation opinions

Group	n	Quantity of adopted opinions	Adoption rate (%)
All patients	100	85	85.00

**Table 2.** Effective rate of clinical pharmacists' consultation opinions

Group	n	Quantity of effective opinions	Effective rate (%)
Patients who were treated by adopting opinions	85	83	97.65

The patient, male, aged 71, admitted to our hospital, was diagnosed as "subacute infective endocarditis". The test results

of blood culture in the clinical process proved that the patient was infected with Viridans Streptococci. Treatment methods given at the time of admission were: azithromycin injection (0.5 g, ivgtt, qd) and penicillin sodium (8 million IU, ivgtt, q12h). During the consultation process, the clinical pharmacists gave the following suggestions for the treatment methods: (1) As penicillin is time-dependent antibacterial drugs, giving penicillin twice a day in the original treatment scheme cannot maintain the antibacterial effect, affecting the realization of its antibacterial purpose to some extent. Therefore, the use of the drug should be changed to 4–6 times a day. (2) From the perspective of antibacterial effect, the antibacterial spectrum of azithromycin and penicillin used in this treatment is similar, making the combination of them of little significance. In this case, the pathogenic factor was Viridans Streptococci. Therefore, penicillin, which is more sensitive to this kind of bacteria, should be a better choice. (3) Considering that the elderly patient had low renal function, pharmacists suggested controlling the dosage below 5 million IU.

Consultation comments: relevant research shows that for patients with diseases caused by subacute infective endocarditis, antibacterial drugs should be given according to the anti-infection principles, and long-term intravenous administration is necessary in order to effectively achieve the antibacterial purpose. When giving penicillin injection to elderly patients, intravenously guttae by times is beneficial to improving the treatment effect of patients, and can maintain the health of patients.

### 3.2 Arrhythmia

The patient, male, aged 68, admitted to our hospital, was diagnosed as “arrhythmia”. The treatment plan in the clinical process was as follows: verapamil (5 mg, iv), and lantoside C (0.4 mg, iv). Clinical pharmacists participated in the consultation and suggested stopping using the original treatment scheme and changing to propafenone (70 mg, iv) instead. There was no significant improvement after 30 min of the administration of the drug, and 35 mg of drugs were added. After 10 min, the clinical symptoms of the patients basically disappeared and turned to sinus rhythm.

Consultation comments: verapamil and lantoside C can inhibit the conduction of atrio-ventricular node, making impulsion fall in the vulnerable period of ventricular muscle, and then leading to ventricular fibrillation. To deal with this problem, propafenone is applied, which helps to suppress atrial fibrillation, and has a positive promotion significance for the slowing down of patients’ heart rate and the recovery of sinus rhythm.

## 4. Discussion

Clinical pharmacists’ participation in consultation of elderly cardiology is conducive to ensuring that reasonable suggestions can be given to the diagnosis and treatment plan according to the actual situation of patients, and can ensure the rationality of the drug use plan. Moreover, this consultation mode is beneficial to greatly reduce the incidence of drug misuse, and can reasonably protect patients’ health.

In this study, the adoption rate of clinical pharmacists’ consultation opinions was 85%, and among the adopted opinions, 83 patients benefited from them, with an effective rate of 97.65%. Thus, it can be concluded that organizing clinical pharmacists to participate in consultation is helpful to realize the reasonable maintenance and guarantee of patients’ health, and is of great significance and value.

To sum up, in clinical consultation work, medical staff should actively guide clinical pharmacists to carry out corresponding nursing service in order to further improve the comprehensive quality of consultation.

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