

# Analysis of the Influence of Pharmacy Guidance on Medication Adherence of Diabetic Patients

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**Abstract:** Pharmacy guidance is an important way of medical service, which has a positive impact on improving medication adherence of diabetic patients. The role of pharmacy guidance is mainly to improve patients' medication adherence by promoting patients' understanding of drugs, standardizing patients' medication behavior, enhancing patients' initiative and self-management ability, and strengthening communication and trust between doctors and patients. Pharmacy guidance can enable patients to better understand drugs, establish the correct concept of drug use, and avoid the risks associated with improper drug use. In addition, pharmacy guidance can also improve patients' self-management ability and self-control awareness, so that patients can take more initiative to control the disease and achieve better therapeutic effects. Therefore, pharmacy guidance plays a very important role in improving medication adherence of diabetic patients and is worth to be widely carried out in clinical practice.

**Keywords:** Pharmacy guidance; Diabetic patients; Medication adherence

## 1. Importance of Diabetes Mellitus and Medications for Diabetic Patients

Diabetes mellitus is a chronic metabolic disease, which is mainly characterized by glucose levels in the blood that are chronically higher than the normal range. Diabetes has become a public health problem globally, and millions of people worldwide die from diabetes and its related complications every year. People with diabetes require long-term medication to maintain stable blood glucose levels. At the same time, people with diabetes often need to take a range of measures, including diet, lifestyle modification and medication, to manage their condition and avoid developing diabetes-related

complications. Therefore, it is crucial to understand the importance of diabetes and medication for diabetics. First of all, diabetes has a significant impact on the health and life safety of patients. The persistence of blood glucose levels above the normal range in diabetic patients can lead to a series of chronic complications such as cardiovascular disease, kidney disease, and eye disease. The development of these complications may cause long-term or even permanent damage to the patient's bodily functions and pose a threat to the patient's life safety. Secondly, the treatment of diabetes requires long-term medication control. Medications can be used to control blood glucose levels and reduce the risk of developing complications. However, medication



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requires long-term adherence and regular adjustments in dosage and timing as recommended by the doctor. It is not possible to achieve good therapeutic results through medication alone, but also requires patients to adopt a healthy lifestyle, such as a sensible diet and reasonable exercise<sup>[1]</sup>. Again, controlling diabetes can reduce the economic burden on individuals and the country. The treatment of diabetes requires a large amount of medical resources, including the cost of examination, treatment and medication. Therefore, reducing the number of diabetic patients is very important for both individuals and countries. Controlling diabetes requires long-term treatment that is low-investment but highly effective. With good diabetes care, health care costs due to progression of the disease can be reduced and dependence on health care resources can be reduced, resulting in significant economic benefits for the patient and the country. Patients and families with diabetes need to cope with the psychological, social and family stresses associated with the disease. Diabetes can have an impact on the patient's family and social life, such as employment and insurance, and can even change the patient's lifestyle habits. However, good diabetes treatment can reduce the deterioration of the disease, reassure patients to engage in family and social life, and improve family well-being and quality of life.

## **2. Pharmacy Guidance and Its Role in Diabetes Treatment**

Pharmacy guidance is an important medical tool that helps patients better understand and control their disease through health education and drug use guidance. In the treatment of diabetes mellitus, pharmacy guidance plays a crucial role and can have a significant impact on patients' medication adherence and therapeutic effects. (1) Pharmacy guidance can improve the drug knowledge of diabetic patients. Due to the wide variety of drugs in clinical treatment, patients are often unable to accurately understand the effects and usage of the drugs they take on their disease. Pharmacy guidance provides a platform to help patients better understand the types and uses of medications, including their mechanisms of action, dosing times, methods of administration, adverse reactions and contraindications. The transfer of this knowledge can help diabetic patients to better control

their own treatment process, which in turn improves the therapeutic effect<sup>[2]</sup>. (2) Pharmacy guidance can improve the medication compliance of diabetic patients. Because diabetes requires long-term drug treatment, the problem of medication compliance has always been a difficult problem for doctors. Pharmacy guidance can help patients control their condition by providing drug knowledge, reasonable medication program and management of adverse drug reactions. At the same time, pharmacy guidance can also help patients avoid misuse of drugs and reduce adverse drug reactions, thus improving the safety of drug use. (3) Pharmacy guidance can guide patients to form a healthy lifestyle. The treatment of diabetes not only relies on medication, but also needs to be combined with a healthy diet and exercise to change lifestyle. Pharmacy guidance can guide patients to understand reasonable diet and exercise, and strengthen daily self-monitoring and management. The formation of these healthy habits can reduce the recurrence rate of diabetes and improve the quality of life of patients. (4) Pharmacy guidance plays an indispensable role in diabetes treatment. Pharmacy guidance can improve the drug knowledge of diabetic patients and enhance their confidence in treatment; pharmacy guidance can help patients improve medication compliance and reduce the risk of medication misuse; pharmacy guidance can also guide patients to form a healthy lifestyle and prevent the recurrence of diabetes mellitus. Overall, pharmacy guidance is an indispensable part of diabetes treatment, which can help patients better understand their medication regimen and master their condition, and better cope with the challenges of diabetes. In actual medical practice, pharmacy guidance should develop different treatment plans for different types of patients<sup>[3]</sup>. For example, the elderly, because of their weaker body functions and greater physiological changes, need more detailed drug guidance as well as timely explanation of adverse reactions. Adolescents need targeted dietary pocket programs and moderate exercise programs because of physical growth and development. Therefore, pharmacy guidance needs to fully consider the special circumstances of the patient to provide personalized and comprehensive treatment plans.

### 3. Medication Adherence in Diabetic Patients

#### 3.1 The Current Situation and Impact of Medication Adherence in Diabetic Patients

The current status of medication adherence in diabetic patients is not satisfactory. According to research, only 50% to 70% of diabetic patients around the world are able to use medication correctly in strict accordance with doctors' instructions. In China, the medication adherence of diabetic patients is even more worrying, and some diabetic patients take medication irregularly and irrationally, which can cause serious harm to the life and health of diabetic patients. There are many reasons for poor medication adherence in diabetic patients. On the one hand, due to the long-term nature, complexity and high cost of diabetes treatment, patients usually feel tired, frustrated and depressed, and even a "burnout period" of treatment. On the other hand, poor communication between doctors and patients, irrational guidance from doctors, and inappropriate application of medications are also some of the reasons for poor medication adherence in diabetic patients. Poor medication adherence in diabetic patients has adverse effects on their health status, quality of life and economic burden<sup>[4]</sup>. First, medication irregularity can lead to poor control of diabetes, thereby increasing the risk of developing diabetic complications and posing a threat to patients' health. Second, medication irregularity increases the difficulty of daily self-monitoring, which is fundamental to diabetes control. Finally, irregular medication use will increase patients' treatment costs, because irrational medication use will lead to drug waste and unnecessary medical expenses, which will bring additional burden to patients' life.

#### 3.2 Factors Affecting Diabetic Patients' Medication Adherence

Medication adherence of diabetic patients is affected by a variety of factors. First of all, the severity of the disease is one of the main factors affecting the medication adherence of diabetic patients. In general, the more severe the disease, the more types and doses of medications patients need to use, and the burden of care increases accordingly, which will increase the inconvenience of patients' medication and reduce their medication adherence. Patients with diabetes need regular blood glucose monitoring, total calorie counting

and a balanced diet, as well as some regular exercise. If the patient does not have good self-management skills, it will make the medication, testing and exercise less regular and affect the patient's medication compliance. Communication and mutual cooperation with the doctor are also related to the patient's medication adherence. When there is poor communication between the patient and the physician, the patient's medication adherence will be affected<sup>[5]</sup>. In addition, a poor relationship between the patient and the doctor can lead to a loss of confidence and hope for cure, which can lead to a decrease in the quality of treatment. Other factors such as the patient's knowledge of medicines, the difficulty of consultation, the cost of medicines, and so on, can affect the medication adherence of diabetic patients.

### 4. Influence of Pharmacy Guidance on Medication Adherence

#### 4.1 Introduce the Specific Implementation of Pharmacy Guidance

Pharmacy guidance is an important form of medical service, which can have a positive impact on the medication adherence of diabetic patients. In the process of pharmacological guidance, the physician will take into account the specific situation of the patient, and provide detailed explanations and instructions on the characteristics, usage and precautions of the drug, so as to help the patient to use the drug correctly, improve the safety and effectiveness of the drug, and promote the control effect and therapeutic effect of the disease. Specifically, pharmacy guidance needs to consider the following aspects: (1) Listen to the patient's needs. Physicians should first understand the patient's disease status and treatment needs before providing personalized medication guidance. (2) Review the medication regimen. The physician should review the patient's medication regimen in detail, including the name of the medication, dosage, usage, and frequency of administration, among other information, to ensure the safety and effectiveness of the medication regimen. (3) Explain drug information. Physicians should explain to patients in detail the characteristics of the drug, usage and side effects and other information, so that patients can better understand the drug and avoid improper use. (4) Reinforcement of medication use. Physicians should introduce patients to the correct method of medication administration, such as how and