

Analysis on Influencing Factors and Preventive Measures of Traditional Chinese Medicine Dispensing Quality

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Abstract: Objective: To study the factors affecting the dispensing quality of traditional Chinese medicine and give the corresponding preventive measures. **Methods:** 50 patients with quality problems of traditional Chinese medicine dispensing in our hospital from February 2018 to February 2020 were divided into observation group and control group to analyze the causes of the problems. **Results:** The number of patients with cross bucket problem was 23, accounting for 46.00%. There were 13 patients with poor quality of traditional Chinese medicine, accounting for 26.00%. There were 8 cases of unclear drug delivery explanation, accounting for 16.00%. There were 2 cases with dose problems, accounting for 4.00%. There were 2 cases of drug confusion, accounting for 4.00%. There was 1 case of missing drugs, accounting for 2.00%. There was one patient with incorrect footnote execution, accounting for 2.00%. **Conclusions:** The factors affecting the quality of traditional Chinese medicine dispensing are cross bucket problem, dose error, drug distribution, etc. Among them, cross bucket problem is the most important factor, which should be paid attention to and necessary measures should be taken to prevent it.

Keywords: The quality of traditional Chinese medicine dispensing; Influencing factors; Preventive measures

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1. Introduction

When patients choose traditional Chinese medicine to treat diseases, they often need targeted treatment according to the specific situation of patients, so the requirements for traditional Chinese medicine dispensing are also different. Traditional Chinese medicine dispensing refers to dispensing drugs for patients according to the prescriptions issued by doctors. In this process, processing drugs, traditional Chinese medicine theory and other aspects need to be involved. If there are errors in the dispensing process, the efficacy of prescriptions will be affected and patients will be harmed^[1]. In order to strengthen the safety of traditional Chinese medicine dispensing, 50 patients with traditional Chinese medicine dispensing quality problems in our hospital were selected to analyze the factors affecting the quality of traditional Chinese medicine dispensing and the corresponding preventive measures. The research results are as follows.

2. Data and Methods

2.1 General Information

50 patients with problems in the quality of traditional Chinese medicine dispensing in our hospital from February 2018 to February 2020 were selected, including 27

male patients and 23 female patients. The maximum age of the patients was 67 years old, the minimum age of the patients was 45 years old, and the average age was (57.67 ± 5.73) years old.

2.2 Methods

The cases of all patients participating in this study were analyzed, and the factors affecting the quality of traditional Chinese medicine dispensing were summarized.

2.3 Evaluation Criteria

The number of quality problems of traditional Chinese medicine dispensing in patients participating in this study was counted, and the proportion of each influencing factor was calculated.

2.4 Statistical Analysis

SPSS 24.0 statistical software was used to process the data, and the counting data were expressed in $(n / \%)$, χ^2 test, the measurement data are expressed in $(\pm s)$, t test, $P < 0.05$ was considered statistically significant.

3. Results

The factors affecting the quality of traditional Chinese medicine dispensing are summarized in Table 1.

Table 1. Factors affecting the quality of traditional Chinese medicine dispensing [n /%]

Group	Cross bucket problem	Poor quality of traditional Chinese medicine	Unclear drug delivery explanation	Dose problem	Drug confusion	Missing drugs	Incorrect footnote implementation,
Number of cases	23	13	8	2	2	1	1
Proportion (%)	46.00	26.00	16.00	4.00	4.00	2.00	2.00

4. Discussion

The traditional Chinese medicine prescription in our hospital adopts electronic prescription, so the traditional prescription is scrawled and difficult to identify, and the deployment quality problem caused by it no longer exists. However, in the research on the quality of traditional Chinese medicine dispensing in our hospital, it is found that there are some problems, such as cross bucket problem, poor quality of traditional Chinese medicine, unclear drug delivery explanation, dose problem, drug confusion, missing drugs, incorrect footnote implementation, etc. The following summarizes the factors affecting the quality of traditional Chinese medicine dispensing and gives solutions.

First, the problem of cross bucket and its solutions. It is possible that one or more of a patient's traditional Chinese medicine may be misplaced with other drugs, resulting in wrong prescription allocation and affecting the treatment effect. The primary reason for the occurrence of cross bucket is that the bucket spectrum is not standardized. The drugs in the traditional Chinese medicine pharmacy are placed in the medicine bucket, and dozens of medicine buckets form the medicine dispensing cabinet used in the traditional Chinese medicine room. Because there are many drugs in the traditional Chinese medicine room, in order to facilitate the work of dispensing personnel, the drugs need to be arranged in the medicine bucket, and this arrangement method is called bucket spectrum. When the bucket spectrum arrangement is unscientific, for example, three different grids with different performance and efficacy drugs are packed in the same drawer, it is easy to bring one drug to another, resulting in the phenomenon of cross bucket, and it is difficult for the dispensing personnel to find the drugs quickly and accurately, which is easy to lead to mistakes. Our hospital now uses traditional Chinese medicine small packaging and traditional Chinese medicine granules. New medicine racks are placed on both sides of the corridor, arranged with the initials of the medicine name from A to Z, but there is a new situation of cross bucket. Adjacent drugs will cross each other through the partition gap, and the outer packaging is very

similar, which should not be recognized by the dispensing personnel, resulting in deployment errors. To solve this problem, the following measures can be taken: 1) Strengthen the daily management of traditional Chinese medicine room to ensure the correct storage position of drugs; 2) The dispensing personnel need to enhance their sense of responsibility and improve their work detail; 3) The verification personnel shall increase the comprehensiveness of the verification work to ensure the correctness of each paste of traditional Chinese medicine.

Second, poor quality of traditional Chinese medicine and its solutions. The variety of traditional Chinese medicine is abundant. With the increase of human activity space, the environmental scope suitable for the growth of traditional Chinese medicine is shrinking, and the dosage of traditional Chinese medicine is increasing, so artificial planting is needed. The quality of artificially planted traditional Chinese medicine is uneven. On the one hand, it is difficult for artificial planting to meet the conditions of natural growth, and many planting personnel lack relevant traditional Chinese medicine planting knowledge, which makes the quality of planted traditional Chinese medicine poor^[1]. On the other hand, in order to make higher profits, many traditional Chinese medicine growers will overuse pesticides and other substances in the planting process, resulting in a significant decline in the quality of traditional Chinese medicine. From the above aspects, it can be seen that the quality of traditional Chinese medicine decoction pieces made from this traditional Chinese medicine is unqualified, And after the processing of traditional Chinese medicine into traditional Chinese medicine decoction pieces, it needs to go through long-term storage, transportation and other steps. During this period, if the storage conditions of traditional Chinese medicine decoction pieces are unqualified or the transportation conditions are inappropriate, the quality of traditional Chinese medicine decoction pieces will be reduced. And many illegal vendors in order to seek more benefits will also be mixed with some inferior drugs, which will further affect the quality of drugs. To solve this problem, hospitals and relevant drug supervision departments need

to take effective prevention measures to ensure the quality of purchased drugs^[2]. First of all, the hospital should select regular and qualified manufacturers, and send special personnel to inspect the manufacturers in all aspects. Secondly, in the process of traditional Chinese medicine dispensing, dispensing personnel should check the quality of drugs, and report to the hospital in time once they find inferior drugs purchased. Finally, the relevant drug supervision departments need to strengthen supervision, inspect and manage the operation, storage conditions and transportation of traditional Chinese medicine, and severely crack down on the circulation of inferior traditional Chinese medicine in the market.

Third, unclear drug delivery explanation and its solutions. The last step in the process of traditional Chinese medicine dispensing is dispensing. When the dispensing, dispensing personnel need to check the patient's information during dispensing, and then they need to check the drugs according to the prescription to avoid mistakes. Finally, dispensing personnel need to inform patients of the use of drugs and precautions. In the process of dispensing drugs, dispensing personnel may not clearly explain the method of taking drugs, decocting methods and other matters needing attention, which may lead to mistakes in the process of decocting drugs and medication, thus affecting the therapeutic effect^[3]. The reasons for the above problems are often caused by the non-meticulous work of dispensing personnel in the process of dispensing drugs, the unstable basic knowledge of dispensing personnel and so on. In order to avoid the above problems, the following measures can be taken for effective prevention. On the one hand, the professional skills training of dispensing personnel should be strengthened, so that the dispensing personnel can skillfully master the incompatibility, the decocting methods of various drugs, the precautions during medication, etc. On the other hand, it can effectively manage the dispensing process and formulate the detailed process of traditional Chinese medicine dispensing, so that the dispensing personnel can act according to the process, which can greatly avoid problems in the dispensing process^[4].

Fourth, dose problems and their solutions. To ensure the correctness of the prescription, it is necessary to ensure the quality of the drugs, medication methods, decoction methods and other factors. In addition to the above factors, the dose of drugs also has a great impact on the efficacy of the prescription. In the actual traditional Chinese medicine dispensing, a variety of drugs need to be used, and there are many patients, which increases the

workload of the dispensing personnel. In order to speed up the work efficiency, some dispensing personnel will directly grab the drugs by hand and determine the dose according to past experience and feelings, which will lead to errors, making the dose of some drugs insufficient or excessive. However, with the use of small packaging of traditional Chinese medicine decoction pieces and the emergence of traditional Chinese medicine granules, the dose problems caused by the above problems are significantly reduced. The small packaging of traditional Chinese medicine decoction pieces is the electronic weighing and packaging. Traditional Chinese medicine granules refer to using modern technology to extract the effective ingredients of traditional Chinese medicine into small particles. However, there are still new problems in the actual work. For example, in the actual drug dispensing process, 3g/package may be payable, 5g/package may be paid, etc. Therefore, it is necessary to check and confirm the dispensing of drugs by dispensing personnel to ensure the correct dosage of drugs.

Fifth, drug confusion and its solutions. There are many kinds of traditional Chinese medicine, and the names of many drugs are very similar. Under the great work pressure, the dispensing personnel will make mistakes. If the dispensing personnel do not work carefully, it will also lead to the confusion of patients' drugs. This study found that during the preparation of traditional Chinese medicine, *Evodia rutaecarpa* and *Cornus officinalis*, Bulb of Thunberg Fritillary and Tendril-leaf fritillary bulb, Red peony and White peony are confused, which will not only affect the efficacy of the prescription, but also affect patients^[5]. To solve this problem, firstly, it is necessary to improve the seriousness of dispensing personnel's work, and secondly, to check and inspect the drugs after dispensing.

Sixth, missing drugs and their solutions. In the process of traditional Chinese medicine dispensing, there are few drug omissions. The direct cause of this problem is the negligence of the dispensing personnel. This requires the dispatcher to pay more attention to avoid omissions in the work, and check again after the deployment.

Seventh, incorrect footnote implementation and its solutions. When doctors issue prescriptions again, they will mark on the upper right or lower left corner of the name of the prescription Chinese medicine according to the needs of treatment to remind dispensing personnel, who need to operate according to the footnote content. In order to avoid problems in this process, it is necessary to check before the end of the deployment.

According to the research results of this paper, there are several problems leading to the deployment of traditional Chinese medicine, such as cross bucket problem, poor quality of traditional Chinese medicine, unclear dispensing explanation, dose problem, drug confusion, drug omission and incorrect footnote implementation. The factor with the largest proportion is cross bucket problem, followed by poor quality of traditional Chinese medicine and unclear dispensing explanation, and the factor with the smallest proportion is missing drugs, incorrect footnote implementation, etc. It can be seen that the quality problems of traditional Chinese medicine dispensing are mainly caused by the mistakes of doctors, drugs and dispensing personnel. So for maximum to avoid the traditional Chinese medicine dispensing quality problems, it is necessary to improve and improve the professional level and sense of responsibility of doctors and dispensing personnel from the aspects of doctors, drug quality and dispensing personnel, Regularly train doctors and dispensing personnel to improve their professional level. Regular assessment can be conducted, and additional rewards can be given to those with excellent assessment results, so as to stimulate the learning enthusiasm of doctors and dispensing personnel. In addition, the quality of traditional Chinese medicine shall be strictly reviewed, and the qual-

ity level of traditional Chinese medicine dispensing shall be tested regularly to ensure the therapeutic effect.

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