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## RESULTS OF PHARMACEUTICAL EXAMINATION OF PRESCRIPTIONS

### ABSTRACT

The study of results of pharmaceutical expertise was done in order to characterize the mistakes made while writing out prescriptions for medications.

Typical mistakes in the prescription were identified. Errors are organized by types of prescription forms and violations. A sociological survey conducted among physicians, revealed a number of factors that affect the proper execution of recipes. In order to reduce the number of wrong prescription, the model of an uninterrupted drug supply in the form of information system, encompassing the necessary measures to prevent mistakes in the appointment and prescribing drugs, was suggested. The proposed model will be helpful to minimize mistakes made while writing out prescriptions, as well as conflicts with visitors of the pharmacy and the organization of routing and uninterrupted supply of medicines.

**Keywords:** drugs, prescription forms, pharmaceutical expertise, mistakes.

### INTRODUCTION

The prescription serves as the basis for the leave of medicines from pharmacies.

Federal Law No. 61-FZ, dated April 12, 2010, «On the circulation of medicinal products» defines: prescription for a medicinal product - a written prescription of a medicinal product in a prescribed form issued by a medical or veterinary worker entitled to do so for the purpose of dispensing a medicinal product or its manufacture and leave. [3]

The correctness of the formulation of the prescription is, first of all, a reflection of the professional culture and the level of professional competence of the doctor. Wrongly prescribed prescriptions of the doctor cause difficulties in the work of pharmacists, provoke conflicts with visitors, form a negative image of health workers and ultimately adversely affect the quality of drug provision for the population. [1]

The main documents regulating the technology of pharmaceutical prescription examination are the orders of the Ministry of Health of the Russian Federation.

Proper prescribing and prescribing of medicines by doctors is one of the necessary conditions in the organization of a system for the uninterrupted supply of medicines.

The problem of errors in prescriptions is relevant for different countries in the world. [2]

Analysis of available literature showed that no studies were conducted in the Republic of Sakha (Yakutia) on the results of pharmaceutical examination of prescriptions for medicinal preparations.

All of the above has predetermined the relevance of the research topic, the formulation of goals and objectives.

**The purpose of the study:** the systematization of typical errors

in prescribed prescriptions, the determination of factors affecting the quality of prescribing drugs, the development of trouble-free prescription drug provision.

### MATERIALS AND METHODS

By the method of pharmaceutical examination the study of violations of the rules for prescribing and prescribing prescriptions for medicinal products was carried out on the basis of a pharmacy of ready-made medicinal forms, licensed to carry out activities related to the circulation of narcotic drugs, psychotropic substances (hereinafter NS and PW), and two health organizations in Yakutsk. In the course of the research, prescription forms of the forms 107 / y-NP, 148-1 / y-88, 148-1 / y -04 (n), 107-1 / y, logs of transactions related to the turnover of the National Assembly and the Supreme Council the release of the National Assembly and the Parliament for 2016 -17 years, the data of questionnaires of medical workers entitled to issue NS and PI, statistical data, normative acts were used.

### RESULTS AND DISCUSSION

A pharmaceutical examination was carried out on 80 prescription forms that were received by the pharmacy organization in March 2017. 29 (36.25%) of these recipes were written out with errors and inaccuracies.

The revealed violations are systematized according to the type of errors and types of prescription forms.

1) Duration of prescription - 5 cases of receipt of prescriptions with expired validity have been registered. Of these, 3 cases per prescription blank 107 - 1 / y (simple form) and 2 cases at 148-1 / y-88 (for drugs subject to quantitative accounting);

2) Lack of precise dosage - 5 cases of incorrect dosing were recorded. Of these,

2 cases per 107-1 / y, 2 cases at 148-1 / y-88, 1 at 148-1 / y-04 (I) (forms of free leave).

3) The code of the category of citizens is incorrectly indicated in 4 cases on the prescription form 148-1 / y-04 (n) (form of free leave).

4) The stamp LPU - in 2 cases on the special prescription form 107 / y-НП (prescription form for narcotic drugs) there was no stamp.

5) The number of holidays - the excess of the standard for a one-time leave without proper registration.

6) The name in Latin - on the prescription form 107-1 / y (simple form) the name of the drug was not indicated correctly.

7) Printing for recipes - in 2 cases on prescription letter 148-1 / y-04 (I) there was no printing for recipes.

8) «For Special Purpose» marking - in 2 cases on prescription form 148-1 / y-88 excessive amounts of cyclodol and phenobarbital were written out, without the mark «For special purpose».

It is established that the minimum number of errors is made when writing prescriptions for narcotic drugs. But, it should be noted that narcotic drugs, as a rule, are issued to persons entitled to free medication. Therefore, prescription form 107 / y-НП is supplemented with prescription forms 148-1 / y-04 (n) and 148-1 / y-06 (n). For improperly prescribed medicines, no release or sale of medicinal products is made, which causes the loss of part of the treatment time in patients, as well as their conflict with medical and pharmaceutical workers.

35 doctors who have the right to prescribe NA and PI were questioned. A questionnaire consisting of 10 questions was developed for the study. The first part of the questions dealt with the

description of the nature of the work and the frequency of writing prescriptions for NA and PI. The second part of the questions of the questionnaire made it possible to reveal the degree of influence of the recent changes in the legislative framework regulating the procedure for assigning and issuing NA and PI. The third part of the questions is aimed at formulating proposals for the organization of error-free appointment and discharge of NA and PI.

35 doctors-part therapists were surveyed, among them 91% were women, 9% were men. Work experience from 1-5 years - 36% respondents, from 5-10 years 36% respondents, over 20 years- 28% respondents. 28% of doctors with the highest category, 16% with 2 category, 18% with 1 category, the rest without category. On average, everyone takes between 30 and 45 patients a day. All respondents have the right to appoint and write out NA and PI.

According to the results of the questionnaire, it turned out that doctors with experience less than 10 years write prescriptions for NA and PI 1-2 times a week, and doctors with experience of more than 10-20 years of experience write 4-6 recipes per week. All respondents noted that additional working hours are not provided for prescribing and prescribing NA and PI, because of the lack of a common information network with an attached pharmacy, it is not possible to know the presence and dosages of NA and PI in the pharmacy, especially the medicinal forms in the form of transdermal systems.

55% of respondents believe that due to changes in the regulatory framework, the requirements for writing prescriptions for NA and PIs became simpler, which significantly simplified the procedure for

appointing and issuing NS and PI, but 45% of respondents indicated that this did not affect their work in any way.

Sociological studies, as well as the results of a pharmaceutical examination, have shown that three factors influence the quality of prescription forms in accordance with the current regulatory documents:

- inadequate level of knowledge of regulatory legal acts regulating the rules for prescribing and prescribing medicinal products;
- the lack of a regulated time for the procedure of writing out and processing of prescription forms on NS and PI;
- the lack of an information program between outpatient and outpatient institutions and a pharmacy serving according to the prescriptions of these organizations.

For the uninterrupted supply of medicines, including NA and PI, it is necessary to introduce an information system between outpatient clinics and a pharmacy that serves the prescriptions of these organizations. The information system should contain software that allows doctors to have access to the assortment and the remainder of the pharmacy, which will significantly reduce the time of prescription writing. A doctor should have a program with the description of standards of treatment, pharmacotherapy, algorithms for assessing the risk when prescribing medications, possible side effects.

In addition, the system must generate electronic prescriptions, which excludes counterfeit prescriptions, as well as common mistakes.

#### CONCLUSION

As a result of the study, mistakes in prescribing and prescribing doctors

are classified according to the types of violations and forms of prescription forms. Most often doctors make mistakes when indicating the name, dosage, quantity of medicinal product, the code of the category of citizens and the source of financing. The percentage of improperly prescribed prescriptions for the study period was 36.2%. The most effective measure to prevent errors in prescribing and prescribing prescriptions is the introduction of an information system between the polyclinic and the attached pharmacy. The information system should cover all necessary measures aimed at preventing mistakes in prescribing, prescribing medicines and creating a system of uninterrupted provision of the population with medicines.

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