

However, the relatively high rates of primary morbidity in such classes as a disease of the blood and blood-forming organs, endocrine system diseases, congenital anomalies (birth defects) can not always be explained by the extreme conditions of the North. Researchers health in regions belonging to the areas of industrial development, a reasonable question arises: perhaps due to adverse environmental changes we are now seeing a picture of the disease? Answers to these and other issues relating to the Republic of Sakha health (Yakutia), can be obtained only as a result of comprehensive research in the areas of mining. Unfortunately, such studies as part of contractual works, made between

large companies and medical scientific and educational institutions, almost non-existent today.

REFERENCES

1. 1. Zabolevaemost' vsego naselenija Rossii v 2014 godu: stat. materialy Minzdrav RF [Incidence of the Russian population in 2014: stat. materials Ministry of Health of the Russian Federation, et al.]. Moscow, 2015, Part I, 138 p.
2. Petrova P.G. Timofeev L.F. Savina N.V. Krivoschapkin V.G. Douglas N.I. Sostojanie zdorov'ja naselenija Respubliki Saha (Jakutija) na sovremennom jetape i zadachi medicinskogo instituta po ego

ukrepleniju [Health status of the Republic of Sakha (Yakutia) at the present stage and objectives of the Medical Institute to strengthen it] Herald M.K. Ammosov NEFU, 2015, № 1 (01), p. 6-11. ["Medical Science" Series]. [E-science periodical].

About the author

Leonid Fedorovich Timofeev – MD, professor of public health and health care, general hygiene and bioethics NEFU Medical Institute named M.K. Ammosov,

Mailing address: 677000, Yakutsk, Oyunskiy st., 27. Tel.: 8-914-225-88-45.

E-mail: lfnauka@mail.ru.

S.M. Tarabukina, Z.A. Boyarova

MINIMUM RANGE OF MEDICINES COMPLIANCE IN THE PHARMACEUTICAL INSTITUTIONS OF THE REPUBLIC SAKHA (YAKUTIA)

ABSTRACT

One of the questions of present interest in the area of medicinal product is the formation of rational policy, as contributing to full satisfaction of needs of population in medical care and efficient financial performance of pharmaceutical organizations.

An analysis of inspection reports for the years 2012-2014 revealed the lack of certain medications, included in the list of mandatory minimum range, in the pharmaceutical entities.

Objective: to develop the methodology of nomenclature classification of mandatory minimum assortment. To achieve the goal the following tasks were solved: the study of violations of licensing requirements in terms of compliance with the minimum range of medicines for medical care, analysis of the missing items from the list of the minimum range, the determination of the degree of demand and velocity on the basis of expert assessment.

Based on the questionnaire of pharmaceutical experts the classification of drugs in the level of demand and the velocity of circulation was done. The proposed method of determining the level of demand and the velocity of circulation, with obligatory taking into account available balances by pharmaceutical experts, working directly with visitors, will contribute to the continuous maintenance and determining the optimal amount of the prescribed minimum assortment of medicines in the pharmacy organizations.

Keywords: medicinal product, minimum assortment, pharmaceutical experts.

INTRODUCTION

In accordance with paragraph 6 of article 55 of the Federal law dated 12 April 2010 No. 61 –FL «On Medicine Circulation» pharmacy organizations, individual entrepreneurs licensed for pharmaceutical activity, are obliged to ensure approved by the Government of the Russian Federation and formed in accordance with the established procedure the minimum assortment of medicinal preparations necessary for rendering medical assistance. [3]

The minimum assortment of medicinal preparations necessary for rendering medical aid approved by the Decree of the RF Government dated 30 December 2014 No. 2782-R. The Lack of in pharmacies drugs that are included in the list of mandatory minimum range, is

a gross violation of the licensed activity for which administrative responsibility.

The pharmaceutical activity with rough violation of license requirements entail the responsibility established by the legislation of the Russian Federation [1].

On a reported basis of Department of licensing of medical and pharmaceutical activity of the Ministry of health of the Republic of Sakha (Yakutia) for 2012-2014 the same type of violations of license requirements and conditions in pharmacy institutions of the Republic are: - compliance with the established limits retail markups to the actual selling prices of producers on the medicines included in the list of vital and essential medicinal products; violation of rules of storage of medicines for medical use,

failure to comply with the minimum range of medicines.

In this regard, one of the topical issues in the field of medicines in the Republic is the observance of prescribed minimum range of medicines for the medical care. Data analysis of available literature showed that studies of violations in-compliance with the minimum assortment in the pharmacy organizations of different ownership forms in the Republic of Sakha (Yakutia) was carried out. This determined the aim and objectives of the study.

The purpose of the study: development of a methodology for the classification of the item mandatory minimum range. To achieve the goal following problems were solved: the study of violations of licensing requirements in terms of compliance

with the minimum range of medicines for medical assistance, analysis of missing items from the list of the minimum range, to determine the degree of demand and speed of treatment on the basis of expert evaluation.

MATERIALS AND METHODS

The study of violations of licensing requirements by ensuring that the minimum range of medicines in pharmacies carried out on the basis of the 16 pharmacies of different ownership forms for 2012-2014. In the analysis were used 16 audit reports on pharmaceutical institutions of Sakha (Yakutia) of different ownership forms for 2012 - 2014, 12 of them from the city of Yakutsk, 1 - Mirny district, Udachnyj, 1 - Lensky district, Lensk, 1 - Neryungri, 1 - Megino-Kangalassky district, Maya village, questionnaires for pharmaceutical professionals - 20. On the basis of expert evaluation of pharmaceutical professionals conducted an analysis

of the content of the minimum range of medicines in pharmacy institutions, classified drugs according to the degree of demand and speed of treatment.

RESULTS AND DISCUSSION

The current minimum assortment of medicinal preparations in pharmacies are regulated by the Decree of the RF Government dated 30 December 2014 No. 2782-R [2]. During the study period was the Ministry of health of the Russian Federation No. 805n of 15 September 2010, so the analysis of the content of the minimum of the range drawn according to this order. A list of the minimum assortment of medicinal preparations necessary for rendering medical aid is divided into two sections:

- section I - pharmacy (dosage forms, manufacturing, production with the right production of aseptic medicinal preparations);
- section II - pharmacies, branch pharmacies and individual entrepreneurs

licensed for pharmaceutical activity.

From trusted pharmacy organizations to the first section we took the following pharmacy organizations in the form of ownership and organizational structure: the municipal unitary enterprise, limited liability company, production cooperative.

As can be seen in Figure from the list of minimum range, mandatory for pharmacies finished dosage forms, manufacturing, production with the right production of aseptic medicinal products consisting of 57 items average no 4 drug product (7%).

The second section related pharmacy organizations, individual entrepreneurs.

As can be seen in Figure from the list of the minimum range for pharmacies, individual entrepreneurs, consisting of 27 items, in average no 2 drug product.

To conduct to determine the extent of demand and the speed of circulation of medicines from the list of minimum range, also the assessment of reasons leading to violations of licensing requirements pharmacy organizations, was selected sociological method aimed at gathering opinions of specialists with pharmaceutical education, especially those who directly communicate with the visitors of drugstores.

To resolve these goals, we compiled a questionnaire of 15 questions, grouped in 4 blocks:

- demographic profile of respondents (gender, age, location pharmacy organizations);
- the professional status of the respondents (education, work experience, position);
- assessment of the level of demand and speed of medicines from the list of mandatory minimum range;
- the proposals of the experts to improve the situation.

All the questionnaires were subjected to 20 respondents, all female (100%). According to the survey the average age of pharmaceutical professionals working on the trading floor, was 37 years. Education at secondary 15 respondents (75%), 5 respondents highest (25%). Work experience in the position on average is 15 years.

Previously we have proposed a classification of medicines from the minimum of the range in 4 categories:

Category 1 – drugs that have the highest demand or having a fast access (more than 10 packages per day);

Category 2 – drugs that enjoy stable demand or stable with treatment (from 5 to 10 packages per day);

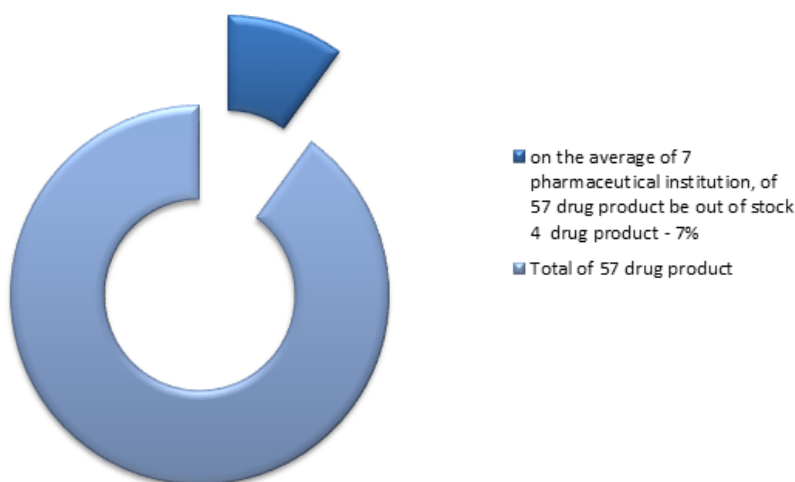


Fig.(a). Pharmacy organizations in the form of CBM, PCs, LLC (7 pharmacies)

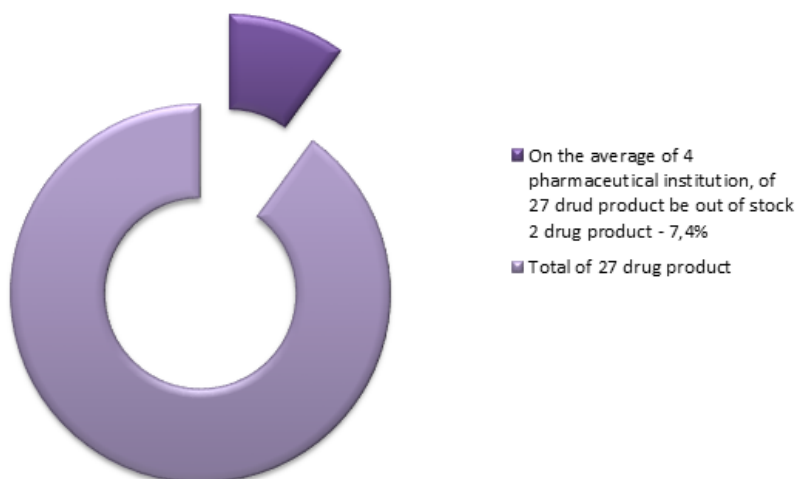


Fig.(a). Pharmacy organizations in the form of CBM, PCs, LLC (7 pharmacies)

Category 3 – drugs, using the least demand or having a delayed treatment (1 to 5 packs per day);

Category 4 – medicinal products are not in demand.

As a result of the study revealed the extent of the demand and speed of medicines.

On the first section of the minimum range, mandatory for pharmacies finished dosage forms, manufacturing, production with the right production of aseptic medicinal products, of the 57 items of the first category of drugs 20 – 35,09 %, to 2 category included 24 drug – 42,11%, to 3 category 11 drug – 19,3%, 4 to a category 2 drug product is -3.5%.

In the second section, the minimum of the range mandatory for pharmacy points, kiosks and individual entrepreneurs, of the 27 items of the first category included 13 drug – 48,15%, to 2 category 12 drug – 44%, 3 to a category 2 drug product is 7.4%.

Tested in pharmacies were no drugs as the highest demand and lowest demand or having delayed treatment. In order to maintain the presence of the minimum assortment of medicinal preparations in accordance with the standards requires continuous monitoring of the movement of drugs from the list. To determine the

optimal stock of item minimum list of drugs in quantitative terms, it is advisable to consider the velocity or quantity of a drug sold during a certain period. These criteria are directly dependent on the location, profile and format of the pharmacy, and must be set taking into account the actual pattern of sales.

CONCLUSION

In the result of the study drugs were classified according to their degree of demand and the rate of circulation of medicinal products. Thus, in the category of drugs which are not marketable on the first section of the minimum range 2 drugs referred, that is 3.5% of the whole item. From the second section to this category 2 drugs referred, which is 7.4% of the entire item.

Wherein in pharmacy organizations at the time of the inspection drugs in this category, but also those in greatest demand and sustainable, were not available. Due to the fact that the absence of drugs, which are included in the list of mandatory minimum range required for the provision of medical care, is a gross violation of the licensed activity, the leaders of pharmacy organizations need to continuously monitor for the presence of these drugs.

REFERENCES

1. Postanovlenie Pravitel'stva RF № 1081 ot 22 dekabrya 2011g O licenzirovani farmaceuticheskoy deyatel'nosti [The RF Government resolution No. 1081 of 22 December 2011 on licensing of pharmaceutical activities].
2. Rasporjazhenie Pravitel'stva RF ot 30 dekabrya 2014 goda № №27820 r. [The Government Executive Order Russian Federation dated 30 December 2014 №27820r].
3. Federal'nyj Zakon ot 12 aprelja 2010 goda №61-FZ Ob obrashhenii lekarstvennyh sredstv [Federal Law of 12 April 2010 №61-FL On Medicine Circulation].

The authors:

Tarabukina Sardana Makarovna – candidate of pharmaceutical Sciences, associate Professor of medical Institute of North Eastern Federal University, first Deputy General Director of the open joint-stock company «Sakhafarmacy», tcmx@mail.ru;

Boyarova Zinaida Alekseevna – student of the 5th course of medical Institute of North Eastern Federal University, Zinaidaboyarova@mail.ru.

NUTRITION IN THE NORTH

Abramov A.F., Sleptsova T.V., Efimova A.A., Vasiliyeva V.T.

THE BIOLOGICAL VALUE OF THE YAKUT CARP'S PROTEINS BY AGE

ABSTRACT

The article presents the results of studies of the biological value of Yakut carp's proteins by age of Lake Nigili in the Kobyaisky District of the Republic Sakha (Yakutia). It is concluded that the meat of carp under the age of 5 by the protein content significantly inferior to the meat of adult carp. Yet carps in the age of 5 have a high biological value - the amount of the amino-acid score is higher than standard (more than 100%).

Keywords: Yakut carp, meat, amino-acids, amino-acid score.

Introduction

Yakut Carp (*Carassius carassius jacuticus*, Kirillov) is the most common commercial species of fish in the lakes of Yakutia. Due to low demands for oxygen it occurs in almost all the lakes in Yakutia, including the northern lakes to 70° 30' N latitude. In this regard, commercial stocks of carp can reach very large volumes [5]. The main commercial stocks available in 20 districts of Yakutia: in the northern, central, western and southern areas. In these areas, the proportion of carp in the annual fish catch is 60-70% [6]. The increases in carp catch are due to the increase in its demand, and most importantly with favorable

ecological conditions of reservoirs for natural reproduction of carp. Over the last decade throughout the water level rises in the lake waters, this is conducive to the further intensification of the growth and development of the food carp.

According to Kirillov A.F. (2002), the largest Yakut carp exceeds by weight 2-3 kg. However, the majority are small carps of 100-200 grams. Carps reach puberty by the age of 3-5 years, the individual fertility is high - 118.5 thousand eggs. They belong to the fish of portion spawning and spawn during the summer 2-3 times, from June until autumn. For one spawning female lays about 40 thousand eggs that stick to the

stems of aquatic plants. The eggs which fell to the bottom die. The larvae from the eggs begin to hatch within a week. At the age of 10 days, the larvae begin to make small swimming movements, and on the 13th day they become active at all. Their length by that time is 12 mm, the larvae begin to feed actively.

Since ancient times, the Yakut carp is almost the most popular product among the population of Yakutia, and remains so today, as it is a valuable source of protein with easily digestible fatty acid fractions, vitamins and mineral elements. Eating fish, including carp, our ancestors have maintained youth and health for a long time.