

За рубежом

© КОЛЛЕКТИВ АВТОРОВ, 2024
УДК 614.2

Karataeva A. M.¹, Bashirov M. B.², Ismailov A. A.³

THE PROBLEMS OF FUNCTIONING OF HEALTH CARE SYSTEM OF THE KIRGHIZ REPUBLIC AND WAYS OF THEIR SOLVING

¹The I. K. Akhunbayev Kirghiz State Medical Academy, 720020, Bishkek, the Kyrgyz Republic;

²The S. B. Daniyarov Kirghiz State Medical Institute of Retraining and Advanced Training, 28838, Bishkek, the Kyrgyz Republic;

³The Medical Faculty of the Osh State University, 723500, Osh, the Kyrgyz Republic

The article presents general analysis of national health care system of the Kirghiz Republic, including particular problems government agencies encounter, role of non-communicable diseases in increasing of total mortality, morbidity and disability of the population. The data is presented concerning economic losses associated with decreasing of labor productivity because of non-communicable diseases morbidity. The priority measures to strengthen primary health care organizations and ways of resolving existing problems in national health care are discussed.

Key words: the Kirghiz Republic; health care system; reforms of medical services; financing of medical and preventive organizations; effectiveness; medical care.

For citation: Karataeva A. M., Bashirov M. B., Ismailov A. A. The problems of functioning of health care system of the Kirghiz Republic and ways of their solving. *Problemi socialnoi gigieni, zdravookhraneniya i istorii meditsini*. 2024;32(6):1384–1387 (In Russ.). DOI: <http://dx.doi.org/10.32687/0869-866X-2024-32-6-1384-1387>

For correspondence: Karataeva Anara Madaminovna postgraduate student of the Kyrgyz State Medical Academy named after I. K. Akhunbayev. e-mail: 2ne1toany@jmail.com

Conflict of interests. The authors declare absence of conflict of interests.

Acknowledgment. The study had no sponsor support.

Received 26.06.2024

Accepted 10.09.2024

Introduction

Health has traditionally been a priority of state policy in the Kyrgyz Republic and in other countries. Health indicators of the population contribute to the level of socio-economic development of the country and determine the potential, opportunities for health, well-being, quality of life and development of each person [1–3].

The main strategic goal of the Ministry of Health of the Kyrgyz Republic is to create the necessary conditions for protecting and strengthening the health of the population of the republic and each individual, regardless of social status and gender differences.

The Compulsory Medical Insurance Fund implements a system of measures for the social protection of citizens in the Kyrgyz Republic, ensuring the receipt of high-quality medical, preventive and other services, provides financial support for the rights of citizens to medical care established by the legislation of the Kyrgyz Republic at the expense of the state budget and compulsory medical insurance.

Despite some progress in reforming the health sector, a number of strategic challenges remain. Issues beyond the competence of the healthcare system have not been reflected in relevant regulatory legal acts, especially on issues of risk factors and determinants of health, child nutrition, ecology and environmental safety, occupational medicine, road safety, injuries and violence, antibiotic resistance, migrant health and others [4, 5].

Materials and methods

The research material was data from the Electronic Health Center of the Ministry of Health of the Kyrgyz Republic, data from official statistics of the Department of Disease Prevention and State Sanitary and Epidemiological Supervision, territorial administrations and the republican compulsory Medical Insurance Fund, and some indicators of the activities of medical and preventive organizations of the republic.

The work uses content analysis, statistical, economic and sanitary-hygienic research methods.

Results and discussion

In the Kyrgyz Republic, over the past decade, an unfavorable situation has developed in terms of the spread of iron deficiency anemia, the scale of deficiency of certain micronutrients — iron, iodine, zinc and B vitamins, primarily folic acid, has increased. The implementation of the adopted legislative norms through the universal enrichment of flour has significantly improved the health status of the country's population. Taking into account the situation with the opening of borders and the dynamics of simplifying the import of goods, including flour, the Ministry of Health of the Kyrgyz Republic initiated the issue of restricting and banning the import of unenforced flour at various levels in order to implement the Law of the Kyrgyz Republic “On the enrichment of baking flour”.

There are gaps in the implementation of recommended cost-effective preventive and clinical interven-

За рубежом

tions for non-communicable diseases (NCD). Diseases such as cancer, cardiovascular, diabetes, chronic respiratory and mental disorders, as well as risk factors (tobacco smoking, excessive alcohol consumption, unhealthy diet and lack of physical activity), are a growing public health problem in Kyrgyzstan. NCD is the cause of 80% of all deaths in the country, the probability of premature death (up to 70 years) of the four main NCDs in 2019, it was 25%.

There are 2,152 secondary schools under the supervision of the Department of Disease Prevention and State Sanitary Supervision, 61.2% of schools in the republic are located in standard buildings. At the moment, about 65 schools in the republic are in disrepair. 38.4% of schools do not have centralized water supply, up to 83.4% of secondary school buildings are not connected to a centralized sewer network, and only 183 or 8.5% of schools in the republic are covered by central heating. 2.9% of schools violate the sanitary rules of the educational process and are organized in 3 shifts, 40.3% of schools do not have gyms, 2.8% of schools do not have a sports ground.

Only 22% of schools in the republic are provided with medical offices. In 2017, out of 1,070,354 children at the entrance to in-depth medical examinations, cases of somatic and other pathology were revealed among students — visual impairment in 17,343 children, impaired posture in 10,827 children, hearing impairment in 3771 children, physical retardation in 7915 children, viral hepatitis in 7271 children, infectious and parasitic diseases in 27,528 children.

There is limited access to quality primary health care services (PHC) and laboratory diagnostic services in rural and remote areas. The main problems are: difficulty in obtaining services at PHC, due to admission only in the morning, low qualifications and lack of personnel, remoteness and transportation costs (64%); limited service radius and unsatisfactory work of sanitary and medical care, problems with patient transportation (55%); difficulties in accessing laboratory diagnostic services due to remoteness, the need for repeated research, and transportation costs (18%). Limited access to high-quality inpatient services at the district level was also noted due to a weak material and technical base, insufficient staff qualifications, and a limited list of services. The Institute of Family Medicine was introduced, groups of family doctors were created throughout the country and about 2700 internists, pediatricians and obstetricians — gynecologists were retrained in short-term (4-month) courses in family medicine. However, the Institute of Family Medicine has not yet been implemented in Bishkek and Osh. The initiated optimization processes in Bishkek to improve the quality of PHC for Bishkek citizens by creating integrated Family Medicine Centers at the district level will improve the management system and rational use of available resources. However, there is unreasonable resistance from some heads of Bishkek family medicine centers.

The reform processes carried out in the field of drug supply over the past more than 20 years have led to the

presence of a developed pharmacy network and a wide range of medicines. At the same time, medicines in the healthcare system are insufficiently managed and underfunded. The level of out-of-pocket expenses for patients remains a problem for the population, among which payments for medicines are the highest of all health-related expenses in the form of total out-of-pocket payments from households per capita.

There is no alternative information environment for unethical marketing, and the availability of financial rewards for doctors from pharmaceutical companies motivates them to prescribe an excessive amount of expensive drugs.

The healthcare system is facing an acute problem of providing remote regions of the country with medical personnel, especially family doctors, which negatively affects the performance of the healthcare system. There remains a significant geographical imbalance in the provision of medical personnel between the city and the countryside. Staffing of secondary medical personnel in rural areas covers the need, while conditions have not been created for the renewal of young personnel due to the employment of full-time positions by persons of retirement age.

There is a lack of effective management at the level of healthcare organizations, due to insufficient knowledge and skills of managers on effective management, which is one of the main reasons for poor-quality provision of medical services, informal payments of the population, collusion of medical personnel with private laboratory diagnostic and pharmaceutical campaigns.

Let's consider the human resources of the healthcare system and the indicators of medical education in the Republic.

As of January 01, 2024, 13,087 doctors (18.1 per 10,000 population) provided medical care to the population of the republic, in 2022 — 13,021 (18.5) and 32,883 specialists with secondary medical education (46.7 per 10,000 population), and in 2022 — 32,880 (51.5) Low availability of doctors remains in Talas (9.7), Jalal-Abad (11.7) and Chui (10.8 per 10,000 population) regions. Insufficient provision of specialists with secondary medical education is noted in the Chui (29.2) region and Bishkek (30.0, per 10,000 population).

One of the main reasons for this situation is the low wages of medical workers.

Also, the current labor legislation of the Kyrgyz Republic does not contain norms limiting the ability to hold a senior position by age in healthcare organizations.

In total, there are 261 heads of healthcare organizations in the republic (254 for 2022), currently 49 people (15.7%), 151 (61.4%) from 40 to 59 years old, 59 people (20.9%) over 60 years old work in the healthcare system. and over 70 years old — 2 people (1.6%)

In large centers of the republic such as Bishkek and Osh (especially surgeons, obstetricians, gynecologists, dentists), there is a division of the staff unit at 0.25 rates, which leads to low wages, creates corruption schemes when hiring and stimulates informal payments.

A key condition for the development of a transparent and accountable healthcare system is the creation of high-quality digital infrastructure and technologies.

The amount of financing for the health sector largely depends on the economic situation in the country. According to the recommendations of the World Health Organization, the share of public health expenditures in gross Domestic Product should be at least 6 percent. In the Kyrgyz Republic, the share of government spending on healthcare to gross Domestic Product in 2017 was 3.1%.

Despite the increase in government funding, the available funds are insufficient to provide state guarantees within the framework of state guarantee programs, which leads to the formation of a financial gap, which, according to estimates, ranges from 27% to 39% and is filled by cash payments from the population. The imbalance between the capabilities of the state budget and the obligations of the state specified in the programs of state guarantees has a greater impact on the financial gap. In particular, an increase in the number of categories and the number of people receiving services on preferential terms without additional funding contributes to a further increase in the financial gap of state guarantee programs.

The shortage of funds in healthcare is also due to the incomplete coverage of compulsory health insurance for those employed in the economy (farmers, individual entrepreneurs employed in the informal sector).

Another factor leading to the formation of a financial gap is unjustified hospitalizations, which indicate an inefficient use of available resources.

In turn, the unoptimized infrastructure of the health sector leads to inefficient use of resources, since there are a number of health organizations that are unable to achieve financial stability on their own due to an insufficient number of assigned populations or treated cases, which leads to the need to develop mechanisms for their additional financing.

Every year, about 2.0 billion of Kyrgyz som are spent on government purchases of medicines and medical products in the healthcare sector.

In 2023, 363,005 cases of infectious and parasitic diseases in 40 nosological forms were registered in the republic against 437,188 cases for the same period in 2022, that is, 17 % lower.

In the general structure of infectious and parasitic morbidity, 75.5% is the incidence of influenza and acute respiratory viral infection (ARVI) (273,957 cases). Cases of paratyphoid, diphtheria, and tetanus have not been reported. Compared to the same period last year, there is a decrease in the incidence of acute intestinal infections (AII), ARVI and influenza, echinococcosis, tuberculosis, HIV infection, COVID-19.

In the Kyrgyz Republic, the overall mortality, morbidity and disability of the population are largely determined by non-communicable diseases and require clear prioritization in determining the strategy and tactics of active therapeutic and preventive interventions. An analysis of the burden of disease conducted by the Regional Office for Europe of the World Health Organiza-

tion shows that almost 60% of the total burden of NCD is accounted for by 7 leading risk factors: high blood pressure (12.8%); tobacco smoking (12.3%); harmful alcohol consumption (10.1%); high blood cholesterol (8.7%); overweight (7.8%); insufficient consumption of fruits and vegetables (4.4%) and a sedentary lifestyle (3.5%).

NCD has a negative impact on the socio-economic development of the country. Only from cardiovascular diseases, economic losses as a result of temporary disability, according to the results of the calculation of representatives of the Regional Office for Europe of the World Health Organization (2017) for 2015 in Kyrgyzstan amounted to 1.5 billions of Kyrgyz som and from diabetes mellitus 1.1 billions of Kyrgyz som.

Prevention and control of NCD is a particularly strategic and potentially cost-effective investment. Premature mortality, morbidity and disability of the population associated with NCD has a negative impact on the social and economic development of the country. NCD in Kyrgyzstan causes a sharp increase in health care costs, social support and welfare costs, as well as an increase in the burden associated with a decrease in labor productivity and turnover of workers. According to estimates, 3.7 billion of Kyrgyz som were spent from the state budget in 2015 on the treatment of the main 4 NCDs (oncological, cardiovascular, diabetes and chronic respiratory diseases) 3,7 billions of Kyrgyz som.

The economic losses associated with a decrease in labor productivity from the NCD are almost 4 times higher than the volume of government allocations, and amount to 14.6 billion Kyrgyz som. Overall, the current economic impact on the Kyrgyz economy related to the NCD is 17.1 billion Kyrgyz som per year, equivalent to 3.9% of the country's annual gross domestic product.

Based on the above, public procurement of medicines and medical devices conducted by healthcare organizations requires serious improvement using effective approaches and tools.

Another key challenge in mobilizing health sector resources for the coming period is the reduction of external financing. Despite the increase in government funding, the available funds are insufficient to provide state guarantees within the framework of state guarantee programs, which leads to the formation of a financial gap, which, according to various estimates, ranges from 27% to 39% and is filled by cash payments from the population. The imbalance between the capabilities of the state budget and the obligations of the state specified in the programs of state guarantees has a greater impact on the financial gap.

Despite these significant achievements, several strategic challenges remain.

A limiting factor for further optimization and modernization of the health sector infrastructure is the lack of clear coordinated mechanisms for reinvesting the released funds. The lack of guarantees on the possibility of redirecting funds during the restructuring of the health care system affects the increased resistance to changes in the health sector. Another limiting factor in restructuring is the fact that in a number of localities medical or-

За рубежом

ganizations, along with educational structures, perform the function of the main employer and their optimization can lead to social tension.

In turn, the unoptimized infrastructure of the health sector leads to inefficient use of resources, since there are a number of health organizations that are unable to achieve financial stability on their own due to an insufficient number of assigned populations or treated cases, which leads to the need to develop mechanisms for their additional financing.

Insufficient managerial and financial independence of healthcare organizations limits their ability to improve the efficiency of using financial resources. In particular, it is necessary to continue the process of transition from controlling the article-by-article use of the budget by health organizations to analyzing and evaluating the results of their activities.

Currently, there are no mechanisms for financing the provision of preventive services at the population level, while the provision of these services is less costly and more effective relative to the treatment of diseases.

Conclusion

Thus, it can be concluded that despite the increase in public financing of the healthcare sector, the material and technical base of healthcare organizations does not meet the standards and, accordingly, the population receives better and more effective medical care, there is a shortage of personnel, especially in the primary sector, insufficient preventive work is carried out among the population and the spread of a healthy lifestyle.

Based on the conducted research, we consider it appropriate:

1. Review the program of state guarantees to provide citizens with health care, depending on the actual financing.

2. Calculate the cost of treatment of the main common diseases.

3. Ensure the implementation of e-health in healthcare organizations, including the National Database of Medicines and Medical Devices.

4. Take measures to popularize the promotion of physical culture, sports, healthy lifestyle and the implementation of the Sports Kyrgyzstan program.

5. To carry out work to strengthen the primary level of health care, including: full implementation of family medicine (including Bishkek, Osh), improvement of the material and technical base, personnel and information technology support, increasing accessibility to medicines.

6. To carry out work on the optimization of inpatient services, with the introduction of modern methods of diagnosis and treatment, modernization of infrastructure in regional centers.

REFERENCES

1. Ismailov M. A., Dolonbaeva Z. A., Abilov B. A. Experience in initiating HRH projects in the healthcare sector of the Kyrgyz Republic. *Healthcare in Kyrgyzstan*. 2021;(1):117–23.
2. Karataev M. M., Ismailova F. U. Issues of market assessment and forecasts of its development — as an important component for the implementation of public-private partnership projects in the healthcare system. *Bulletin of Science and Practice*. 2022;8(6):549–55.
3. Karataev M. M., Ismailova F. U. Patient satisfaction with the quality of emergency medical care on the example of the city of Osh. *Bulletin of Science and Practice*. 2023;9(1):213–22.
4. Karataev M. M., Abdrakhmanov Sh. T., Chyngysheva Zh. A. Optimization of organizational and economic activities of medical and preventive organizations in the application of marketing research. *Bulletin of the International University of Kyrgyzstan*. 2018;2(35):389–95.
5. Babaev F., Karataev M. Features of the need and accessibility of renal replacement therapy for patients with chronic kidney disease in Azerbaijan. *Biomedicine*. 2023;43(1):353–7.

Поступила 26.06.2024
Принята в печать 10.09.2024