GLU Working Paper No. 63

ON THE STATE OF THE BELARUSIAN HEALTHCARE SYSTEM

August 2024

Lev Lvovskiy

Global Labour University (GLU) is a network of trade unions, universities, the ILO and labour support organisations across the world. GLU:

- develops and implements university postgraduate programmes on labour and globalization for trade unionists and other labour experts;
- undertakes joint research and organizes international discussion forums on global labour issues;
- publishes textbooks, research and discussion papers on labour and globalisation issues.

Editorial Board

Contact Address

Global Labour University - Freunde und Förderer e.V. - Prof. Dr. Christoph Scherrer; Prenzlauer Allee 186, 10405 Berlin, Germany

E-mail: scherrer@uni-kassel.de

http://www.global-labour-university.org

First published 2024.

ISSN: 1866-0541 (print) ; 2194-7465 (PDF)

Table of Contents

Abstract

The Belarusian healthcare system is a direct heir to the Soviet medical model, retaining all its strengths and weaknesses. Currently, its functioning can be considered satisfactory: key indicators such as life expectancy and healthy life expectancy are generally comparable to European standards. However, the main problem is that the system is not sustainable in the medium and long term. At present, it is relatively inexpensive for taxpayers, but this is achieved through low salaries and challenging working conditions for doctors. Consequently, these factors are leading to the gradual relocation of medical professionals, putting the future of Belarusian healthcare at risk.

How much does Belarus spend on healthcare?

A large share of healthcare spending in Belarus comes from the state budget. It is estimated that the share of budgetary expenditures on health care is about 70% of the total expenditures. In the period from 2010 to 2015, the share of government spending fluctuated around 3.7-3.9% of GDP and reached the WHO recommended 4% only in 2016 (WHO, 2024). In recent years, Belarus has been spending about 4.2-4.4% of GDP on healthcare, except for the pandemic years of 2020 and 2021, when the state healthcare expenditures amounted to 4.7 and 5.1% of GDP, respectively. Due to the withholding of data starting in 2021, total healthcare spending can only be roughly estimated at 6.4% of GDP, assuming previous trends continue.

Table 1. Health care expenditures of the Republic of Belarus

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
State Expenses	3.8	3.4	3.7	3.8	3.7	3.9	4.2	4.1	4	4.1	4.7	5.1	4.4	4.4
General expenses	5.7	5.5	5.3	5.7	5.1	5.8	5.9	6	5.6	6	6.3	7.4*	6.4*	6.4*

Source: Belstat, own calculations

If we compare the total expenditures on healthcare in Belarus with its neighbours and other European countries, we can state that the country is ahead of its neighbours in the Commonwealth of Independent Sates (CIS), but loses in this indicator to all other groups of European countries. Thus, in 2018, the total spending of Belarus was 5.6%, the average for the CIS was 4.3%, the new EU members spent on average 6.5%, EU countries 9.4% and European countries 7.3% of GDP (WHO, 2024). It is necessary to take into account that the absolute values of per capita expenditures between Belarus and European countries differ even more due to the difference in the size of GDP. Based on the average per capita GDP in the EU of $35.8 thousand and the corresponding figure for Belarus of $6.4 thousand in 2018, the average Belarusian spent only 10-11% of the average EU citizen on healthcare. This 10% figure is the lower limit, since the relative cost of an hour of work for a doctor in Belarus is also several times lower than in European countries. However, it should be taken into account that Belarus buys a significant share of equipment and medicines on the international market, which means it pays the same amount for them as its European neighbours. Based on this logic, the greatest inequality in the level of consumption of medical services and goods between Belarusians and EU citizens is observed in the most technologically advanced branches of medicine. Although there is a fairly large supply of doctors, Belarusians receive worse medical supplies and have less access to modern devices and medicines. The relatively low cost of labour for medical

specialists in Belarus is both a positive and negative factor for end consumers. On the one hand, low labour costs allow Belarusians to have fairly easy access to medical specialists, on the other hand, uncompetitive salaries worsen the personnel problem in the healthcare sector of Belarus in the medium and long term (more on this in the Personnel section).

Table 2. Health care expenditures in Belarus and selected groups of countries.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Belarus	5.7	5.5	5.3	5.7	5.1	5.8	5.9	6	5.6	6	6.3
CIS	5.4	5.2	5.4	5.4	4.9	4.5	4.6	4.3	4.3		
EU members after 2004	6.7	6.5	6.5	6.6	6.6	6.6	6.6	6.6	6.5	6.6	6.8
EU	9.6	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4		
WHO European Region	7.9	7.7	7.8	7.8	7.6	7.5	7.5	7.4	7.3		

Source: WHO.

In the period 2010-2020, about 70% of healthcare costs in Belarus were borne by the budget, 26% were personal payments from citizens, and the remaining share was accounted for by voluntary health insurance (VHI) (WHO, n.d.). The largest share of personal payments by citizens falls on the purchase of medicines, as well as the purchase of paid services, for which there are analogues provided by the state system.

In the period 2015-2021, private medicine developed in Belarus—private medical enterprises selling medicines, engaged in laboratory tests and research, dentistry and ophthalmology became widespread. In addition, private hospitals and clinics began to appear. This trend was stopped and reversed in 2021, when government authorities began to actively regulate, and sometimes outright ban, the activities of private medical institutions. The trend towards the spread of voluntary health insurance in 2021-2022 slowed down but was not reversed. In 2022, about 650 thousand Belarusians signed up for voluntary health insurance, and in 2023 this figure increased to 713 thousand (Belarusian Association of Insurers, 2024). According to a study conducted by the Institute of Sociology of Belarus, in 2024, 22.8% of the urban population chose private clinics to receive primary medical care.[1] De facto this results

[1] Institute of Sociology of the National Academy of Sciences of Belarus. (n.d.). Public Opinion of the Population of the Republic of Belarus on Their Health and the Healthcare System. Retrieved July 30,

in the development of an income-related two-tier health system with its own risks such as overmedication the affluent citizens and undermedication of those who cannot pay.

Formally, the financing of public medicine in Belarus is regulated by the Law of the Republic of Belarus on Health Care of 1993 and its amendments. The President of the Republic determines the state policy in the field of healthcare, the Ministry of Finance, based on the established policy, determines the budget, which is then agreed upon with the Ministry of Health, adopted as part of the republican and local budgets and implemented. In practice, the Ministry of Health is developing a system of standards that includes minimum requirements for compliance with standards. Based on the fulfilment of minimum standards, the necessary budget is formed, which is then distributed between the republican and local parts. Then, the budget requested by the ministry is compared to other government goals for the budget year and is either satisfied in full or reduced. During the pandemic, it was decided to allocate a significant portion of funds in excess of the minimum standards; in subsequent years, the budget returned to its long-term trajectory. Since funding is most often based on minimum standards, managers of health care institutions and local officials have virtually no freedom in making legal decisions that affect the budget. In reality, due to the widespread system of data fraud, there is still some possibility of redistributing allocated resources, which gives the system some flexibility but at the same time, the process of executing local budgets can become corrupt.

1. Who makes the decisions?

The management of the healthcare system of the Republic of Belarus is carried out by the Ministry of Health (MoH), which includes an extensive structure of the central apparatus (see Fig 1.) and the subordinate regional health committees and the health committee of the Minsk City Executive Committee.

The publicly declared main tasks of the Ministry of Health are:

1. Organization of medical care to the population;

2. Ensuring sanitary and epidemiological well-being of the population;

3. Establishment of drug provision for the population;

4. Coordination of scientific research and implementation of scientific and technological achievements in medical practice;

5. Synchronisation of the activities of other republican government bodies and other state organizations subordinate to the government, local executive and administrative bodies, legal entities and individuals in the field of healthcare;

2024, from https://socio.bas-net.by/mnenie-naseleniya-respubliki-belarus-o-sobstvennom-zdorove-i-sisteme-zdravoohraneniya/

6. Implementation of state policy in the field of providing psychological assistance, with the exception of state policy in the field of providing psychological assistance in the education system;

7. Ensuring the fulfilment of indicators of the forecast of socio-economic development of the Republic of Belarus;

8. Attracting investments, including foreign ones, in the field of healthcare and industrial production of medicines;

9. Alignment of activities to organize and ensure production, structure and range of medicines, as well as to improve its quality and competitiveness, develop the export potential of the domestic pharmaceutical industry;

10. Execution of state policy to protect the economic interests of domestic manufacturers of medicines in the foreign and domestic markets and state support for their exports.

Based on the points described the work of the MoH is contradictory from the very foundations. Point 7 reveals an important element of the practice of super-centralized management systems. MoH should be engaged in both prediction and implementation of their own forecasts; in addition, the financing of the state part of healthcare in Belarus depends on forecasting and its post-facto implementation.

The objectives declared in Paragraph 10, in practice, often contradict the aspirations declared in the first paragraphs to provide treatment to Belarusians. It is obvious that lobbying the interests of domestic drug manufacturers can and does come into direct conflict with the interests of society. For example, Belarus has long refused to purchase foreign vaccines against COVID-19 to wait for domestic development.

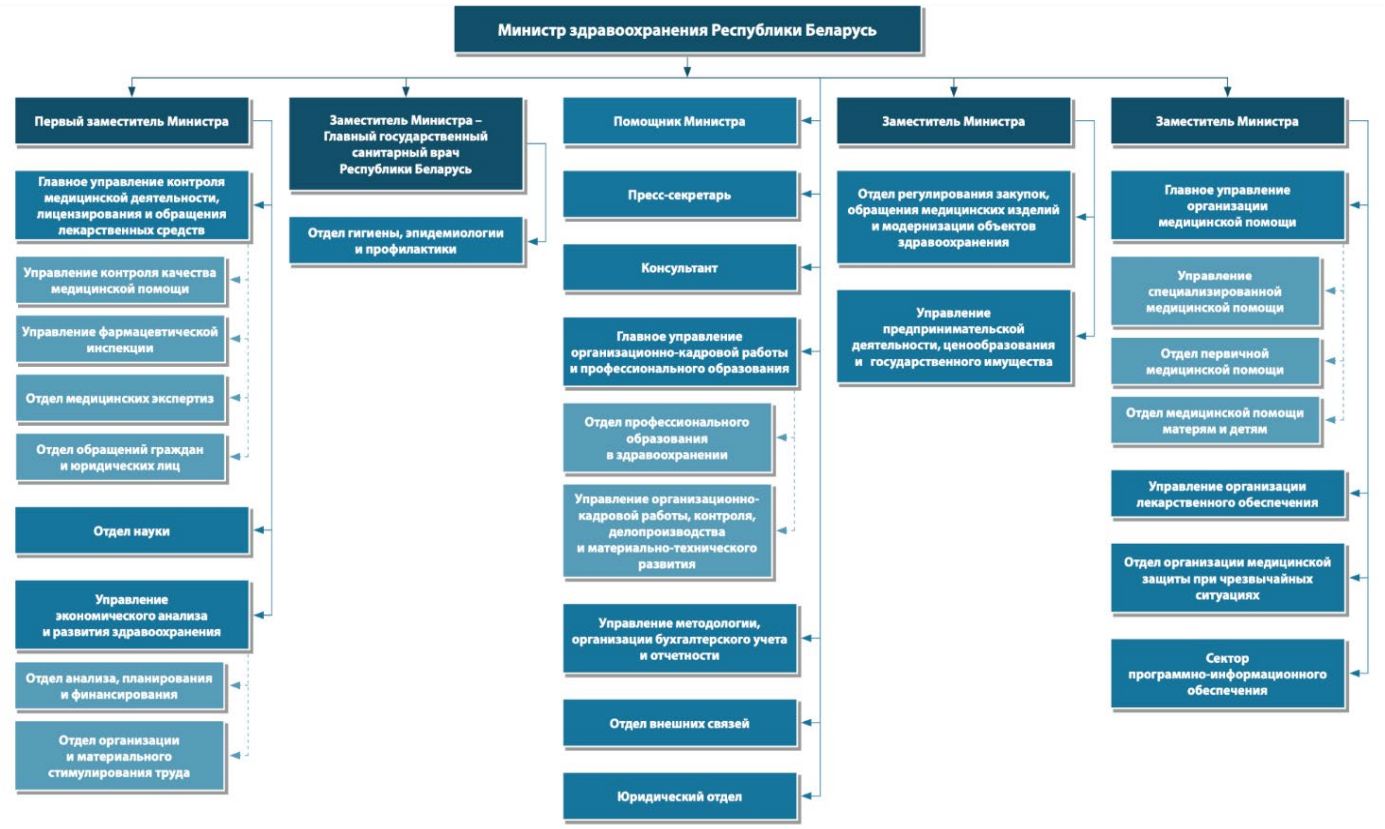
Formally, the structure of the MoH of the Republic of Belarus is not truly vertical, however, despite the fact that only a number of healthcare institutions report directly to the MoH of the Republic of Belarus (Republican Scientific and Practical Centres), inspections and personnel decisions are often made in the Ministry of Health, bypassing the health committees, which creates additional difficulties. In addition to that, there is a problem of interference of officials in the work of specific healthcare institutions. Even though formally the chief physician of the hospital makes assessments on personnel in the hospital, often decisions on the positions of head of department and above are deliberately enforced and ensured that they are in agreement with higher authorities (health committees or the MoH), which is an additional factor of corruption and worsens relationships within teams.

Most medical workers in Belarus work in the state system. The presence of one dominant employer implies possibilities of monopsonistic behaviour. At the same time, there are practically no mechanisms for protecting the rights of medical workers in the country. The healthcare workers' union is independent from the authorities only nominally, but in fact exists for the purpose of control and collection of funds from workers. Independent medical trade unions that began to emerge were liquidated by the authorities.

Given the lack of organizations in the country representing the interests of medical workers, resolution of work issues at the level of department heads and above often occurs behind the scenes through personal acquaintances in higher authorities. Ordinary medical workers find themselves completely unprotected and it is almost impossible to resist pressure from management.

The system, practically does not involve competition between medical institutions, and therefore, does not provide an opportunity to achieve competitive growth in salaries of medical workers, reduce costs and improve the quality of services provided. The excessive hierarchy of the Belarusian system creates prerequisites for the fabrication of reporting statistics, one of the main obstacles to any attempts to modernize the healthcare system in Belarus.

Figure 1: *MoH of the Republic of Belarus*



2. Personnel question

Providing the Belarusian healthcare system with personnel is one of the most important issues from the point of view of the sustainability of the entire system. The main reason that Belarus can have a medical system that simultaneously costs about 10 times less than in EU countries and at the same time gives comparable results at the macro level is the presence of a sufficient number of highly competent medical workers who are willing to work for a moderate salary. This situation also creates the

main potential point of instability in the country's healthcare, as the growing wage gap between Belarus and neighbouring countries is rising, hence the motivation of specialists to leave is constantly increasing, as well as the outflow of personnel. Today, the official supply of Belarusians with medical personnel is quite comparable with the average European indicators, however, the reliability of official data is questionable, and current trends make us worry about this problem, regardless of the starting point.

According to official statistics, the number of practicing doctors per 10,000 population in Belarus in 2022 was 52.2, and the number of paramedical workers was 135.4 per 10,000 population (National Statistical Committee of the Republic of Belarus. n.d.). These figures exceed the average for the European region, where, according to the WHO report (WHO, 2022), the number of doctors is 37 per 10,000 people and nursing staff 105.7 per 10,000 people. Such statistics do not agree with the official concerns of the Belarusian government or with the calculations of independent analysts. Thus, according to a 2023 study, the actual supply of doctors in Belarus ranges from 26 to 40 doctors per 10,000 population (Civic Monitoring of the Healthcare System. n.d.).

Salaries

By the end of 2023, the average salary of doctors in Belarus reached 3,000 rubles gross salary.[2] The average doctor receives the equivalent of 740 Euros, which is 50% higher than the national average salary. The average accrued salary of a doctor in Poland during this period was about 4064 Euro equivalent, which means that after paying the average tax, doctors could claim 3137 Euro, which is 131% higher than the average salary in the country. The average salary in the hands of Lithuanian colleagues was 5019 Euros, which exceeded the national average by 168%. The average German doctor earns 5,389 Euros after taxes, which is 144% higher than the average (Eurostat, 2024; OECD, & European Union, 2022). As you can see, doctors in neighbouring European countries not only earn many times more than their Belarusian colleagues, but their standard of living relative to other workers in these countries is also growing. The average salaries of doctors in Ukraine and Russia are not too tempting for Belarusian specialists, but if one focuses only on the capitals of these countries, where salaries can be several times higher than the national average, then here too Belarus will lose in competition in the labour market.

Personnel shortage

In addition to the loss in wages, the problem with personnel in Belarus is aggravated by the disdainful attitude of the state towards medical workers; disorganization of the system, forcing staff to do unnecessary work; political persecution, which led to the dismissal and expulsion of many specialists from the country, as well as demographic problems.

[2] This amount takes into account the actual workload of doctors, which on average in Belarus is 1.5 times the rate (60 hours per week). It is worth noting that in the EU countries with which doctors' incomes are compared, working hours vary and can range from 48 to 80 hours a week.

As is the case with other data[3] provided by the MoH, open data on the availability of medical personnel is most likely fraudulent. Thus, according to a study conducted by ByMedSol and ZUBR in 2023, in some regions of Belarus, the official supply of medical personnel could be twice as high as the real one (Civic Monitoring of the Healthcare System, n.d.).

Even based on official data on the number of medical workers, the Belarusian authorities began to pay attention to the problem of staff shortages. The unspoken decision that was made in recent years, motivating working medical workers to increase their workload, apparently, has ceased to be sufficient or has reached the limit of its effectiveness.[4] According to official data, the part-time ratio, that is, how many times one doctor works on average, is 1.37, while independent analysts are inclined to the figure of 1.5. This means that the reserve for extensive growth in the supply of medical labour in Belarus has already been exhausted, since only a small number of doctors are physically capable of a heavy workload.

Another method—increasing enrolment in medical universities—which took place in 2013-2021, also ceased to work due to demographic reasons. The generation of current applicants is one of the smallest in the modern history of Belarus. If at the peak, in 2016, 2,673 people graduated from Belarusian medical universities, then in 2022 the total number of graduates was 1,864.

The new idea, voiced by Alexander Lukashenko, in 2023, is to increase the mandatory service for doctors after residency from two to five years. Such a measure will most likely actually reduce the personnel shortage, especially in the short term. On the horizon for more than five years, that is, at the moment when personnel who went to medical universities begin to graduate after the adoption of the decree, this measure will motivate potential medical personnel to leave the country even before residency or to leave the country in violation of the law, thereby losing the opportunity to return.

Such “extensive” measures to increase the supply of medical personnel, in addition to their ineffectiveness over horizons of more than five to six years, also contribute to the deterioration of the average quality of medical training. On the one hand, the interest of specialists themselves in improving their qualifications is decreasing, on the other hand, access to advanced training programs is made difficult by the state itself, trying to increase the time of actual work.

The most acute problems with staff shortages are felt in small towns and villages. Due to the peculiarities of the socio-economic development of Belarus, people prefer to live in large cities. Part of the problem of shortage of specialists in small towns and rural areas can be solved through mandatory distribution. However, as in other cases, this solution to the problem is not sustainable in the long term. Thus, under the old work system, the rate of employment of specialists in rural areas and small towns ranged from 20 to 50%. It is possible that the new, longer service will help increase this indicator, but it should be remembered that it will most likely reduce the total

[3] https://gazetaby.com/post/takoe-chuvstvo-chto-v-oficialnoj-statistike-soblyu/178659/
[4] https://civicmonitoring.health/post/worker-exploitation/

number of people wishing to study at Belarusian medical universities and professional medical schools.

Demographic problems

The demographic situation in Belarus negatively affects the sustainability of the healthcare system in several ways.

First, due to the small number of Belarusians born in the late 90s and early 2000s, the number of students at medical universities is naturally decreasing.

Second, working specialists are also aging, which is why the absolute and relative number of doctors of pre-retirement and retirement age is growing. According to official information, in some areas the share of retired doctors reaches 20%. This situation is fraught with the fact that, along with a decrease in the number of specialists entering the profession, a significant proportion of workers may simultaneously stop working, retiring or losing their ability to work.

Third, the aging of the population means an increase in the demand for medical services, since, according to statistics, older people consume them disproportionately more than middle-aged people and even children.

Finally, changing the gender and age structure of society not only increases the demand for medical services, but also changes it. For many medical systems this is not a major problem, but the Belarusian system of planning and vertical reporting is quite rigid, and the revision of regulations and the resulting restructuring of service offerings could pose a significant challenge for Belarus.

Personnel outflow

The outflow of medical personnel from Belarus in recent years is already quite clearly manifested in the statistics of neighbouring countries. According to statistics provided by the Polish Minister of Health, in 2022 alone, the country issued about 1,000 work permits for doctors from Belarus.[5] The Polish side did not provide more recent data; however, we can safely assume that this figure continued to increase in 2023. The latest published data, dated 2018, on the number of Belarusian doctors in Germany, is about 480 specialists that encourages the relocation of Belarusian doctors.

3. Material resources

The modern healthcare system of Belarus inherits many features of the Soviet Semashko system developed in the first half of the 20th century. One of the properties of this system is its focus on combating epidemics, which implies the maintenance of excess bed capacity and the priority of inpatient treatment over outpatient treatment. Despite the recent COVID-19 pandemic, epidemics in the 21st century have

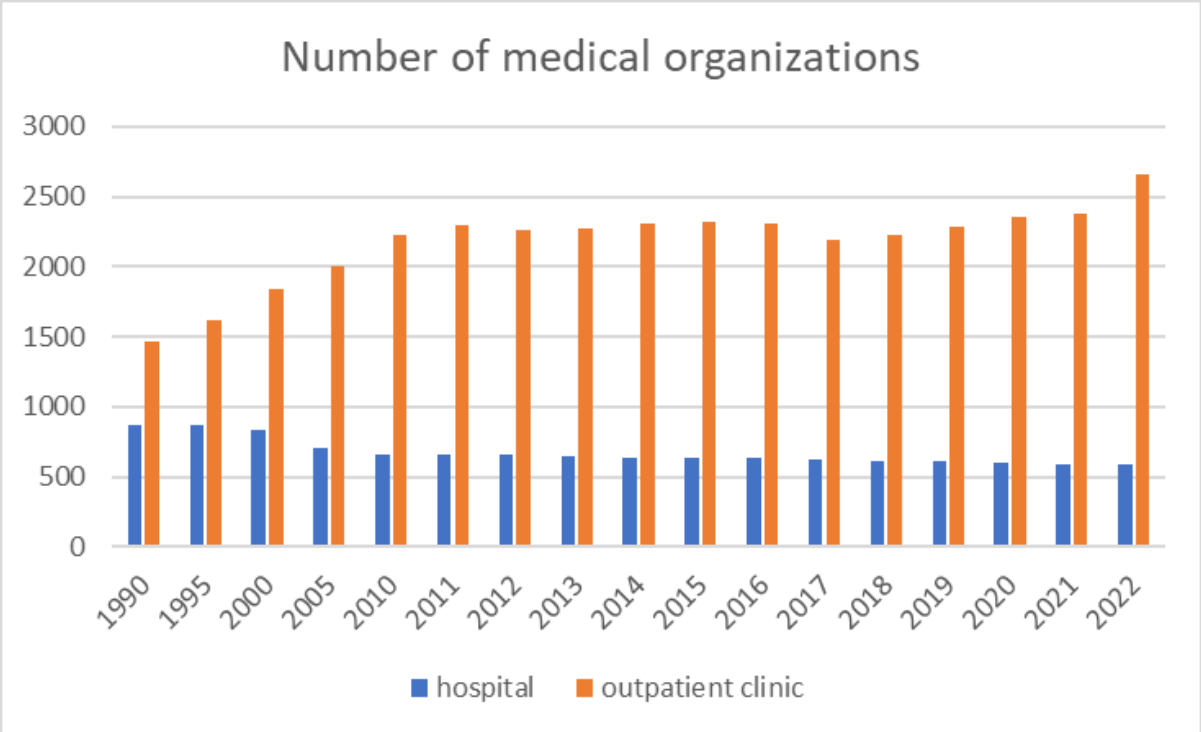
[5] https://news.zerkalo.io/life/21636.html

become much rarer than at the time of the development of the Semashko system. Vaccinations, prevention, social hygiene, less-crowded housing and better nutrition of the population have led to the fact that epidemics, although they do occur, are quite rare. Maintaining excess hospital beds, on the one hand, makes the healthcare system more protected in case of these rare events, on the other hand, it means permanent ineffective allocation of resources, that is, loss of health during times when there is no epidemic.

At the moment, there are 8 beds per 1000 inhabitants of Belarus. Maintaining such a bed fund not only means ineffective spending, but also affects other properties of the health care system. For example, to maintain budgetary demands, the system motivates doctors to fill these beds with patients, thus artificially inflating the need for inpatient treatment and sometimes exposing people's health to unnecessary risks associated with being in a hospital. In addition, the excess bed capacity configures the system to combat mass diseases, reducing attention to more complex and individual diseases.

It should be noted that with the collapse of the USSR, the healthcare system of Belarus embarked on the path of transition from an inpatient orientation to a modern outpatient one, but this process practically stopped in the 2010s. Figure 2 shows the number of hospital and outpatient clinic organizations in Belarus. Over the same period, the number of beds per 1000 inhabitants decreased from 10.6 to 8. In the Baltic countries this figure ranges from 4.5 to 6.5, in Poland 6.5, and in Sweden 2.

Figure 2. Number of medical organizations of various types in Belarus.



Source: Belstat

4. Efficiency

At the current moment, with all the problems characteristic of the Belarusian healthcare system, it should be considered highly effective. At costs almost 10 times less than in neighbouring European countries, Belarus achieves similar top-level results. Thus, life-expectancy in Belarus is 75 years; for comparison, this figure for Lithuania is 76.85 years, Latvia 76 years, Poland 78.6 years, Sweden 83.65 years. The average healthy life expectancy in Belarus is approximately 66 years, in Lithuania 66.7, in Latvia 66.2, in Poland 68.7, and in Sweden 71.9 years.

The rosy picture of the effectiveness of Belarusian healthcare crumbles upon a deeper analysis of the results. Thus, along with good average life-expectancy indicators, Belarus is one of the leaders in gender inequality in life expectancy; Belarusian men on average live 10 years less than women. Such an imbalance leads to many negative socio-economic phenomena, and correcting it requires both greater flexibility of the system and well-developed methods for collecting and analysing high-quality medical statistics. Currently, without reliable data, it is virtually impossible to understand what exactly drives such gender gap and what are the potential ways to address it.

Analysis of the effectiveness of the Belarusian healthcare system at the level of individual diseases is completely impossible due to problems with data falsification. The hyper-vertical system of subordination, as well as the legal insecurity of medical workers, forces doctors and local officials to falsify reports, and when they get to the top of the data collection system, they are often subject to additional manipulations. According to surveys of current and former doctors and medical officials, some diseases in Belarus are politicized, and the publication of real statistics on them could cost doctors their careers. Moreover, the list of politicized diseases and conditions includes both expected ones, such as maternal mortality, and unexpected ones, such as certain types of cancer. Authors of the current review are aware of at least one case of complete loss of a database for one type of disease, which was subsequently replaced with fictitious data.

The current system cannot be assessed positively from the point of view of long-term or even medium-term sustainability. The key factor in the super-efficiency of Belarusian medicine is the presence of a sufficient number of specialists ready to work for relatively modest salaries. Even according to official data, this situation is increasingly becoming a thing of the past, and in 2023 the system was missing 5,000 doctors and 3,000 nurses. Moreover, these figures came from the All-Republican Bank of Vacancies, that is, they took into account all overtime and part-time work for existing doctors. If we try to implement the official standards for the employment of doctors provided for by the legislation of the Republic, namely, the maximum duration of a medical worker's shift not exceeding 24 hours and compliance with the required rest time between shifts exceeding 12 hours, then the system will collapse.

The wage gap between doctors in Belarus and neighbouring European countries will continue to grow, and with it the outflow of specialists. Measures to increase the practice of forced labour taken by the state will only give a short-term effect. In the

medium term, the additional flow of specialists and students abroad will completely cancel the effect of additional specialists who simply cannot leave. At best, the reduction in the number of specialists will be replaced by a deterioration in their quality.

References

Belarusian Association of Insurers (2024, February) Journal of the Belarusian Association of Insurers. Retrieved July 30, 2024. Available at: https://belasin.by/journal/2024

Civic Monitoring of the Healthcare System (n.d.) Doctors Count. Retrieved July 30, 2024. Available at: https://civicmonitoring.health/post/doctors-count/

Civic Monitoring of the Healthcare System (n.d.) Worker Exploitation in Belarus: Report on Sociological Research Results. Retrieved July 30, 2024. Available at: https://civicmonitoring.health/post/worker-exploitation/

Eurostat (2024, June 14) Healthcare personnel statistics - physicians. Retrieved July 30, 2024. Available at: https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Healthcare_personnel_statistics_-_physicians&oldid=460643
https://socio.bas-net.by/mnenie-naseleniya-respubliki-belarus-o-sobstvennom-zdorove-i-sisteme-zdravoohraneniya/

Institute of Sociology of the National Academy of Sciences of Belarus (n.d.) Public Opinion of the Population of the Republic of Belarus on Their Health and the Healthcare System. Retrieved July 30, 2024. Available at:
National Statistical Committee of the Republic of Belarus (n.d.) Healthcare Statistics. Retrieved July 30, 2024. Available at: https://www.belstat.gov.by/ofitsialnaya-statistika/solialnaya-sfera/zdravoohranenie_2/

OECD, & European Union (2022, December 20) Remuneration of doctors, ratio to average wage, 2020 (or nearest year). In Health at a Glance: Europe 2022: State of Health in the EU Cycle. Retrieved July 30, 2024. Available at: https://www.oecd-ilibrary.org/social-issues-migration-health/remuneration-of-doctors-ratio-to-average-wage-2020-or-nearest-year_d0efe063-en

World Health Organization (2022, September 14) Ticking timebomb: Without immediate action, health and care workforce gaps in the European Region could spell disaster. Retrieved July 30, 2024. Available at: https://www.who.int/azerbaijan/news/item/14-09-2022-ticking-timebomb--without-immediate-action--health-and-care-workforce-gaps-in-the-european-region-could-spell-disaster

World Health Organization (n.d.) Global Health Expenditure Database: Country Profiles. Retrieved July 30, 2024. Available at: https://apps.who.int/nha/database/country_profile/Index/en

About the author

Lev Lvovskiy has served as a senior research fellow at the Belarusian Research and Outreach Centre (BEROC) since 2017. He has taught in BEROC undergraduate and graduate programs, as well as at the European Humanitarian University and a number of special interest courses, such as Economics for Journalists school. He is currently a teaching fellow at the Centre for Economic Research and Graduate Education – Economics Institute (CERGE-EI). He holds a doctoral degree from the University of Iowa.

Global Labour University - Freunde und Förderer e.V.
Prenzlauer Allee 186, Berlin 10405, Germany
www.global-labour-university.org
scherrer@uni-kassel.de