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N. KurbekoThe Institute of Economics of the National Academy
of Sciences of Belarus, Minsk, Belarus**ON THE ROLE OF THE PHARMACEUTICAL INDUSTRY
IN THE REAL SECTOR OF THE ECONOMY**

One of the most promising areas of activity of the Republic of Belarus is the development of the pharmaceutical market. The article considers the functional role of the pharmaceutical industry of the Republic of Belarus as well as its development as one of the spheres of the real sector of the country's economy.

The work reveals the socio-economic importance of the production of the pharmaceutical industry. The current state of the pharmaceutical market, its changes, the latest progresses and tendencies prevailing in this industry at the present time are assessed. The main directions of the pharmaceutical industry for the near future are highlighted, taking into account the pandemic and post-pandemic periods.

Keywords: pharmaceutical industry, economy, innovation, pharmaceutical market, biotechnology, scientific and technological progress

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Н. А. КурбекоИнститут экономики Национальной академии
наук Беларуси, Минск, Беларусь**РОЛЬ ФАРМАЦЕВТИЧЕСКОЙ ПРОМЫШЛЕННОСТИ
В РЕАЛЬНОМ СЕКТОРЕ ЭКОНОМИКИ**

Одной из перспективных сфер деятельности Республики Беларусь является развитие рынка фармацевтической продукции. В работе рассмотрены функциональная роль фармацевтической промышленности Республики Беларусь, ее развитие как одной из сфер реального сектора экономики страны.

Раскрывается социально-экономическая значимость производства фармацевтической промышленности. Рассматривается текущее состояние фармацевтического рынка, изменения, новейшие тенденции и течения, сложившиеся в этой отрасли в настоящее время. Выделяются основные направления фармацевтической отрасли на ближайшую перспективу с учетом пандемийного и постпандемийного периодов.

Ключевые слова: фармацевтическая промышленность, экономика, инновации, фармацевтический рынок, биотехнологии, научно-технический прогресс

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Introduction

Strategic improvement of the quality of life of the population of the Republic of Belarus. In modern conditions of the formation of the economy, one of the primary goals of social economic policy, the state also provides the availability of high-quality medical and pharmaceutical care. In this regard, the pharmaceutical industry, due to the social significance of the products manufactured, the high degree of science intensity of production and the investment attractiveness of business, occupies a special place in the economic sphere of the country.

Main results

The real sector of the country's economy includes, first of all, industrial production, consisting of enterprises of the extractive and processing industries, agriculture, the provision of industrial, household and other services [1]. In turn, the pharmaceutical industry is an important sector of the country's economy and is a criterion for socio-economic development and the level of welfare of the population.

The developed pharmaceutical industry is one of the indicators of the high innovativeness of the real sector of the economy. The pharmaceutical industry is one of the most successful and profitable activities. Despite the general recession in the global economy in recent years, the pharmaceutical market continues to develop dynamically: its growth rate is approximately 8–11 % per year [2, p. 6].

In modern economic conditions, the pharmaceutical industry is becoming the most profitable industry, which, in fact, is one of the factors in attracting investments in the real sector of the economy of this direction. The internal reserves of the country's domestic pharmaceutical enterprises are an important indicator of the state's ability to counter the threats of global pandemics and bioterrorism.

The social, demographic and economic context in which the global pharmaceutical industry operates is rapidly changing.

Around the world, pharmaceutical companies face pressure from governments and taxpayers to lower drug prices and initiate performance-based pricing. Concurrently, there has been a sharp decline in R&D productivity, a decline in the supply of new drugs, an increase in drug discovery costs, and a tightening of the regulatory measures that companies have to contend with [3].

Many economic experts believe that the pharmaceutical industry has growth potential with an accelerated CAGR of 15 to 20 % over the next 10 years [3].

In the modern period, the domestic pharmaceutical industry of the Republic of Belarus is systematically becoming one of the tools for innovative development. It is worth noting that three types of business are involved in the organization of drug provision – first of all:

- pharmaceutical companies engaged in the production of medicines;
- authorized organizations – distributors involved in the logistics (delivery and storage) of drugs within the country;
- pharmacy chains that carry out retail and small-scale wholesale distribution of drugs to the end consumer.

Domestic Belarusian medicines in value terms occupy about 50 % of the market. However, this figure is influenced by factors that do not depend on the efforts of the pharmaceutical industry. This, for example, can be attributed to a change in the exchange rate, which automatically entails a recalculation and, as a result, the figure may differ by several percent in one or the other direction.

We can say that the pharmaceutical industry is a sub-sector of the chemical industry, the main activity of which is the development, production and sale of medicines. In the course of scientific and technological progress, the pharmaceutical industry has turned from a sub-branch of the chemical industry into an independent research and production complex that produces not only medicines, but also the so-called parapharmaceutical products – using production methods characteristic of pharmaceuticals, but not having pronounced therapeutic, medicinal properties. In particular, we are talking about biologically active additives, vitamin complexes, etc.

The pharmaceutical industry is an industry associated with the research, development, mass production and distribution of medicines for the prevention, relief and treatment of disease [4].

At the same time, this area of activity not only has enormous social and socio-economic significance, but can also be considered as a breakthrough locomotive for the country's innovative economic development [5].

The sphere of production is the basis of the real sector of the economy of the Republic of Belarus and, as a rule, it is material and intangible goods and services of the real sector of the country's economy that form the predominant part of Belarus's exports and completely form the country's GDP. The volume of exports of Belarusian pharmaceutical products for the period 2015–2020 increased by 1.8 times.

The main drug export market is the Russian Federation. Export to developed countries is complicated by the non-recognition by foreign states of GMP certificates (rules that establish requirements for

the organization of production and quality control of medicines for medical and veterinary use) issued by the Ministry of Health of the Republic of Belarus. The share of domestic drugs on the Belarusian market for the first half of the year amounted to 68 % in physical terms [6].

The pharmaceutical industry of the Republic of Belarus is developing systematically and dynamically, so in 2019 the production of pharmaceutical products and drugs accounted for 1.2 % of the total volume of industrial production, there were 100 organizations in the industry employing 10.4 thousand people (1.2 % of the total number of industrial workers) with an average salary of 118.2 % of the industry average. The aggregate net profit of the enterprises of the industry amounted to 159.2 million rubles, profitability – 17.7 % [7].

Currently, more than half of the needs of the Belarusian domestic market for medicines are provided by imported pharmaceutical products and drugs. It should be noted that despite the gradual increase in the volume of production of pharmaceutical products and drugs and their share in the domestic market of the country, domestic manufacturers provide less than half of the domestic market for drugs. The most important feature of the main subjects of the pharmaceutical market of manufacturing enterprises is the high manufacturability of production [8, p. 258].

Most of the supplies of foreign drugs are realized through the distribution systems existing in the Republic of Belarus. At the same time, the largest volumes of imports go through wholesalers of the nationwide level, who conclude contracts with manufacturing companies. They occupy 10–5 positions in the rating of importers. Foreign medicines go to regional distribution networks to large distributors, and through them to small wholesalers, pharmacies and medical institutions. Lectures.

A significant proportion of the consumption of medicines falls on meeting the needs of polyclinics, hospitals and other elements of the state medicine system.

Imports of drugs exceeded \$ 800 million in 2019 and \$ 1 billion in 2020, while the total pharmaceutical production in the Republic of Belarus amounted to 1.36 billion rubles in 2019 (about \$ 630 million; some of these products were exported). Not only most of the prepackaged drugs are imported, but also up to 80 % of the substances for their manufacture [7]. The pharmaceutical market has undergone dramatic changes in accordance with the adopted law «On the Circulation of Medicines» No. 13-3 dated May 13, 2020.

It should be noted that pharmaceutical enterprises (organizations) face a kind of double condition:

1) providing innovative treatments designed to meet the necessary needs of patients and treating life-threatening conditions;

2) ensuring the achievement of maximum profit growth.

Meeting these sometimes conflicting conditions typically requires pharmaceutical companies to transform their business and operating models, and to embrace disruptive technologies, which in turn will allow to lower the costs and to speed up the exposure of pharmaceutical products and drugs to the market at the same time.

From pharmaceutical product and drug development to manufacturing and distribution, pharmaceutical companies are cultivating their business models organized in a «more than 27 pills» way to interact more fully with suppliers and end-users throughout the product lifecycle. At the same time, it is worth noting that these efforts of the pharmaceutical industry are gradually starting to pay off.

At the beginning of 2020, the pharmaceutical industry of the Republic of Belarus faced serious challenges from the coronavirus (COVID-19) pandemic. However, Belarusian pharmaceutical enterprises (organizations) managed to mobilize their resources and adapt to the current difficult situation. In the context of a pandemic, an important priority for the Belarusian pharmaceutical industry has become the country's internal market and the primary provision of its needs. It is worth noting that during this difficult period, the main efforts of Belarusian pharmaceutical enterprises (organizations) were aimed at meeting the needs of healthcare for medicines that are most in demand in the treatment of patients with coronavirus infection. All these reasons influenced the fact that export shifted to a secondary plan.

Focusing on the analysis of the current state of the pharmaceutical industry in Belarus, it is stated that the main goal of the development of the pharmaceutical industry of the Republic of Belarus in the coming years and in the future is to ensure the production and availability of popular medicines, necessary vaccines, the advanced level of scientific, technical and technological development, as well as strengthening its export potential. It should also be noted that the implementation of

the import substitution program in the context of the pharmaceutical industry of the Republic of Belarus mainly depends on raw materials and the necessary pharmacological substances that are required for the production of certain medicines and vaccines.

However, certain pharmacological substances and raw materials are not produced in the Republic of Belarus. For the production of medicines in Belarus, about 30 % of the necessary substances are synthesized, and about 70 % of them are imported. It should be noted that the necessary substances are mostly purchased from countries with a significant competitive advantage in terms of the costs of producing these substances. These countries include India, China, Pakistan.

All of the above indicates the need to develop new methods and technologies for drug treatment, expand domestic production of modern high-tech pharmaceuticals to combat severe and socially significant diseases. The main efforts in the development of the pharmaceutical industry should be directed at increasing the production of essential medicines, vaccines, improving the quality and competitiveness of medicines, including through the introduction of norms and rules in production that meet international standards. In turn, the timely reconstruction and technical re-equipment of pharmaceutical enterprises will allow to organize the production of new effective types of drugs, necessary vaccines and introduce environmentally friendly technologies.

A consistent increase in the level and quality of life of the population, adherence to basic social guarantees, including ensuring the availability of high-quality medical and pharmaceutical care, is the main goal of the state's social policy. A country's ability to develop its own medicines is an indicator of the country's economic development based on an innovative development model, since the process of developing medicines is one of the most difficult, time-consuming and risky in comparison with the development of other innovative products in different sectors of the economy.

At the same time, the main problems of the development of the pharmaceutical industry in the Republic of Belarus are:

- insufficiently high investment and innovation activity;
- increase in the cost of production due to the rise in the cost of raw materials and resources needed for the production of medicine;
- changes in the Tax Code from January 1, 2021, where the procedure for levying VAT on medicines and medical devices (VAT rate – 10 %) is legally established. It entailed an increase in the price of medicines, which was a deterrent for the end user.

Conclusions

Summarizing the above, the following directions are proposed to solve problems and improve the general economic indicators of the development of the pharmaceutical industry in the Republic of Belarus:

- 1) modernization of the production base, technical re-equipment and reconstruction of existing pharmaceutical organizations;
- 2) cost reduction through automation, energy consumption and material consumption;
- 3) production and use of domestic raw materials and substances;
- 4) development of an effective strategy for promoting domestic drugs in the domestic and foreign markets through the use of effective marketing research and PR communication tools;
- 5) development of a methodology for reference pricing in the drug market;
- 6) creation of legal protection in the field of drug circulation at the level of the law.

Given the current situation due to the ongoing outbreaks of coronavirus infection COVID-19, the future of the pharmaceutical industry is also associated with the development of biological products and vaccines. In this regard, it is also necessary to develop science-intensive areas and expand the creation of domestic research and production centers.

References

1. Zueva O. A. Modern approach to the study of the role and convergence of the real and financial sectors of the economy. *Economics and Environmental Management*, 2015, no. 1 (in Russian).

2. Kryukova E. V., Khatskevich G. A. The Republic of Belarus on the way of entering the world pharmaceutical market. Minsk, 2006. 178 p. (in Russian).
3. Dhanalakshmi C. Growth of Indian Pharmaceutical Industry: An Overview. *SK International Journal of Multidisciplinary Research Hub*, vol. 4, iss. 12. Available at: <https://www.researchgate.net/publication/327474331> (accessed 25 July 2021).
4. Universal popular-science encyclopedia Krugosvet. Available at: https://www.krugosvet.ru/enc/nauka_i_tehnika/tehnologiya_i_promyshlennost/FARMATSEVTICHESKAYA_PROMISHLENNOST.html (accessed 20 July 2021).
5. Tkachev S. Domestic pharmaceuticals: let's look into tomorrow. *Economic newspaper*, 2019, February 5, no. 9. Available at: <https://neg.by/novosti/otkrytj/otechestvennaya-farmaceutika> (accessed 20 July 2021).
6. Development of the pharmaceutical industry in Belarus: effective provision of health care and population needs. Available at: <https://www.belta.by/roundtable/view/razvitie-farmatsevticheskoy-otrasli-v-belarusi-effektivnoe-obespechenie-potrebnostej-zdravoohraneniya-i-1288/> (accessed 21 February 2021).
7. Industry of the Republic of Belarus, 2020. Minsk, 2020. 52 p. Available at: <https://www.belstat.gov.by/upload/iblock/aeb/aeb02f77163a24af4b9cfe2dd576b29d.pdf> (accessed 25 July 2021) (in Russian).
8. Kosova I. V. Organization and economics of pharmacy. Moscow, 2002. 400 p. (in Russian).

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