

ANALYSIS OF THE RANGE OF MEDICINES USED IN OBSTETRICS AND
GYNECOLOGY

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Introduction

Special attention is being paid in the Republic of Uzbekistan to modern approaches and the prospects of new complex medicinal products in the treatment of obstetric and gynecological diseases. Considering the achievements in the study of obstetric and gynecological diseases and the development of new drugs, it is important to analyze the assortment of medicinal products used in their treatment. This article presents the results of an assortment analysis of medicinal products used for the treatment of obstetric and gynecological diseases in the pharmaceutical market.

The assortment of drugs used in obstetrics and gynecology, included in the State Register of medicinal products, medical devices, and medical equipment approved for use in medical practice in the Republic of Uzbekistan during 2020–2024, was analyzed. The results of the assortment analysis are presented in accordance with patient needs and quality requirements, and may be useful for manufacturers, distributors, and researchers in the pharmaceutical industry.

Keywords: assortment analysis, gynecological drugs, State Register, renewal index, international nonproprietary name (INN), dosage form, pharmacotherapeutic groups.

Relevance. Globally, obstetric and gynecological problems are among the major factors that significantly affect women's health. Currently, failure to properly and timely treat obstetric and gynecological diseases leads to the progression of diseases to severe stages and, in some cases, contributes to the development of oncological conditions. According to statistical data, the most common diseases worldwide include polycystic ovary syndrome (PCOS), endometriosis, uterine fibroids, cervical cancer, and vaginitis [1,2].

In particular, polycystic ovary syndrome is one of the most common disorders in women of reproductive age, affecting approximately 8–13% of women [3]. The disease is most prevalent among women aged 15–29, with a notable increase observed in the 20–24 age group [4].

Globally, cervical cancer is the fourth most common cancer among women. In 2022, approximately 662,301 new cases and around 350,000 deaths were reported worldwide [5]. In Uzbekistan, 1,884 new cases of cervical cancer were registered in 2023, and 941 women died from this disease [6].

Late diagnosis of the disease (at stages III–IV) significantly contributes to increased mortality rates. This is often due to women's reluctance to discuss gynecological issues and



failure to undergo timely medical examinations. According to the World Health Organization, over the past 30 years, countries with improved socio-economic conditions have seen a significant decrease in both the incidence and mortality of cervical cancer. This is mainly due to the implementation of effective cytological screening programs, as well as timely treatment of precancerous conditions and early-stage cervical cancer [7].

In recent years, our country has also been implementing comprehensive measures aimed at protecting maternal and child health and further strengthening the reproductive health of the population. In particular, a system has been introduced to provide newborns with rare orphan diseases and other hereditary genetic disorders with free medicines, medical devices, and specialized nutritional products, and the scope of medical and social assistance provided to them has been expanded [8].

Studying the pharmaceutical market is one of the key tasks of pharmaceutical marketing [9]. Based on this, analyzing the indicators of registration of medicinal products used in obstetrics and gynecology is one of the actual (relevant) issues in the field of pharmacy.

Research objective. The aim of this study was to conduct a marketing analysis of the assortment of registered medicinal products used in obstetrics and gynecology in the pharmaceutical market of the Republic of Uzbekistan.

Materials and methods. The study was based on data from the State Register of medicinal products, medical devices, and medical equipment approved for use in medical practice in the Republic of Uzbekistan for the years 2020–2024 [10,11,12,13,14]. Methods such as content analysis, as well as analysis of assortment breadth, completeness, depth, and renewal index, were used to evaluate the assortment of medicinal products.

Results. As the object of our study, data from the State Register of the Republic of Uzbekistan for the years 2020–2024 were used. According to these data, a total of 363 trade names of medicinal products used in obstetrics and gynecology were registered. In 2020, 55 trade names were registered, while in 2024 this number reached 69, indicating a 1.25-fold increase over five years. The highest number of medicinal products used in gynecology was recorded in 2022, with 81 registered medicines.

At the next stage, manufacturers from foreign countries and the Commonwealth of Independent States (CIS) were analyzed. Over a five-year period in our country, medicinal products manufactured by foreign producers from 19 countries were registered. Among them, India accounted for 42.30%, Argentina for 10.90%, Germany for 12.70%, and other countries for 34.10%.

Manufacturers from the Commonwealth of Independent States (CIS) were registered in smaller numbers compared to foreign manufacturers.

In the Republic of Uzbekistan, a total of 55 trade names of medicinal products have been manufactured and registered by 14 local pharmaceutical manufacturing enterprises. Among them, medicinal products produced by “Merrymed Farm” Limited Liability Company (LLC) account for the highest proportion.



At the next stage, an analysis of the registered medicinal products was carried out according to their dosage forms. It was determined that the medicinal products were manufactured in various dosage forms, including oral drops, capsules, creams, lyophilized powders for suspension preparation, powders for suspension, powders for solution preparation, powders for topical use, injectable solutions, solutions for topical application, suppositories, gels, and syrups.

It was also found that, among foreign, CIS, and local pharmaceutical manufacturers, medicinal products are predominantly produced in the form of suppositories, capsules, and tablets, which account for the highest share of production.

At the next stage of our analysis, the registered medicinal products were evaluated according to their pharmacotherapeutic groups. According to the results, during 2020–2024, the registered medicinal products belonged to 12 different pharmacotherapeutic groups and were classified according to various Anatomical Therapeutic Chemical (ATC) codes.

It was also found that some medicinal products did not have an ATC classification. These products without ATC codes consisted of combined phytopreparations derived from various plant raw materials and were manufactured in Pakistan.

At the next stage of the analysis, medicinal products used in obstetrics and gynecology were evaluated according to their composition. Table 3 below presents the comparative analysis results of single-component preparations and multi-component (complex) preparations.

Table 3

Comparative analysis results of medicinal products used in obstetrics and gynecology based on their composition

PREPARATION COMPOSITION	2020				2022				2024			
	FOREIGN COUNTRY	CIS	LOCAL	TOTAL	FOREIGN COUNTRY	CIS	LOCAL	TOTAL	FOREIGN COUNTRY	CIS	LOCAL	TOTAL
SINGLE-COMPONENT	7			0	6			9	2			3
TWO-COMPONENT	0			1	5			0	1			6
THREE-COMPONENT					6			3	3			2
MULTI-COMPONENT	3			5	8			1	7			8

In the next stage of the analysis, single-component medicinal products used in obstetrics and gynecology were evaluated according to their composition. According to the results, during



2020–2024, a total of 84 international nonproprietary name (INN) monopreparations, accounting for 23.1%, were registered. Among single-component preparations, medicinal products containing Policresulen, Triptorelin, and Misoprostol were the most frequently registered in terms of the number of trade names. The results of the analysis are presented in Table 4.

Table 4

Analysis results of single-component medicinal products used in obstetrics and gynecology based on their composition

ONE-COMPOSITION PREPARATION COMPOSITION	2020			2022			2024		
	FOREIGN COUNTRY	CIS	LOCAL	FOREIGN COUNTRY	CIS	LOCAL	FOREIGN COUNTRY	CIS	LOCAL
Agni casti fructus extractum siccum*							-		
Agnus castus*							1		
Agnus castus fruit*							-		
Ascorbic acid							-		
Aqueous extract Triticum vulgare*							1		
Bacillus coagulans							-		
Benzydamine*							-		
Carbetocin*							1		
Chlorophylliptum*							-		
Cimicifuga racemosa rhizome*							-		
Cimicifuga rootstock dry extract							-		
Clindamycin							1		
Clindamycin phosphate							-		
Clotrimazole							-		
Ketoconazole							1		
Lactic acid							-		
Lactobacillus rhamnosus*							-		
Laminaria saccharina*							-		
Miconazole nitrate							1		
Misoprostol							1		
Policresulen							2		
Triptorelin							2		
Ulipristal							1		

Over a five-year period, 76.3% of the medicinal products used in obstetrics and gynecology consisted of multi-component (complex) preparations. Among these, a significant number of two-



component, three-component, and multi-component preparations were registered among medicinal products manufactured in foreign countries, CIS countries, and by local pharmaceutical enterprises.

Of the registered multi-component preparations, 36.1% were three-component, 33.9% were multi-component, and 29.9% were two-component preparations. The composition of these multi-component preparations commonly included combinations of active substances such as metronidazole, nystatin, clindamycin, and clotrimazole.

Conclusion. Based on the results of the analysis, it can be concluded that during the period 2020–2024, the import volume of medicinal products used in obstetrics and gynecology and manufactured in foreign countries increased by **1.1 times**. At the same time, the import volume of medicinal products produced in the Commonwealth of Independent States (CIS) decreased by **1.25 times**, while the volume of medicinal products produced by local pharmaceutical manufacturers increased by **7 times**.

Due to the increasing prevalence of obstetric and gynecological diseases, the demand for medicinal products is also rising year by year. Although the production capacity of local manufacturers has increased, it is necessary for them to focus on producing a wider range of high-quality and affordable medicinal products to ensure adequate supply for the population.

References:

1. Cao, Y., Guo, Y., Long, Z., Wu, Y., Pei, B., Ye, J., Zhang, M., Yuan, H., Jia, Y., Liu, X., Wang, F., & Zhao, Y. (2024). The Global Burden of Gynecological Diseases from 1990 to 2019. *American Journal of Preventive Medicine*, 67(5), 698–704. <https://doi.org/10.1016/j.amepre.2024.06.022>
2. Zhu, B., Gu, H., Mao, Z., Beeraka, N. M., Zhao, X., Anand, M. P., Zheng, Y., Zhao, R., Li, S., Manogaran, P., Fan, R., Nikolenko, V. N., Wen, H., Basappa, B., & Liu, J. (2024). Global burden of gynecological cancers in 2022 and projections to 2050. *Journal of Global Health*, 14, 04155. <https://doi.org/10.7189/jog.14.04155>
3. Clinical protocol of the “Republican Specialized Scientific and Practical Medical Center for Maternal and Child Health” on polycystic ovary syndrome. Available at: <https://akusherstvo.uz/protocolsuz#!/tab/825476758-1>
4. Feng, J., Zhang, S., Chen, J., Zhu, J., & Yang, J. (2022). Global burden of endometriosis in 204 countries and territories from 1990 to 2019. *Clinical and Experimental Obstetrics & Gynecology*, 49(10), 235. <https://doi.org/10.31083/j.ceog4910235>
5. Jumpy, I., Harun-Or-Rashid, M., Rustamov, O., Zakirova, N., Kasuya, H., & Sakamoto, J. (2012). Social correlates of female infertility in Uzbekistan. *Nagoya Journal of Medical Science*, 74(3–4), 273–283. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4831236/>
6. Cervical cancer: symptoms, diagnosis, and treatment. Available at: <https://uza.uz/uz/menu>
7. Clinical protocol of the Ministry of Health of the Republic of Uzbekistan, Republican Specialized Scientific and Practical Medical Center for Maternal and Child Health: “Cervical cancer screening, diagnosis, and management of cervical intraepithelial neoplasia.” Available at: <https://akusherstvo.uz/protocolsuz#!/tab/825476758-1>
8. Resolution of the President of the Republic of Uzbekistan No. 296 “On measures to protect maternal and child health and strengthen reproductive health of the population,” dated September 8, 2023. Available at: <https://lex.uz/ru/>



9. Suyunov, N. D. (2006). Expert assessment of the consumption of drugs used in bronchial asthma. *Pharmaceutical Journal, Tashkent*, No. 3, pp. 9–13.
10. State Register of medicinal products, medical devices, and medical equipment approved for use in medical practice in the Republic of Uzbekistan No. 24 (2020). Available at: <https://www.uzpharm-control.uz/>
11. State Register No. 25 (November 30, 2021). Available at: <https://www.uzpharm-control.uz/>
12. State Register No. 26 (December 16, 2022). Available at: <https://www.uzpharm-control.uz/>
13. State Register No. 27 (December 27, 2023). Available at: <https://www.uzpharm-control.uz/>
14. State Register No. 28 (November 29, 2024). Available at: <https://www.uzpharm-control.uz/>
15. Rajabova, N. X., & Suyunov, N. D. (2020). Analysis of anticancer drugs registered in the Republic of Uzbekistan. *Pharmaceutical Journal*, No. 4, pp. 3–9.

