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THE ASSORTMENT ANALYSIS OF STOMATOLOGICAL MEDICINES

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The assortment of stomatological medicines in Ukraine has been investigated according to the ATC classification and countries-producers. The medicinal forms of the medicines investigated have been analyzed. On the basis of the maximum indexes obtained the macrocontour of the target segment of the market has been composed.

Nowadays the most important problem in Ukraine is the health state of the population, as well as the stomatological health.

According to the WHO data, approximately 80% of people suffer from such disease as paradontosis. The prevalence of this disease reaches 80-95% even among children. From 5% to 20% of adults suffer from gum diseases, which can lead to dedentition. In general, the partial dedentition is observed in 75% of the Earth population. Dedentition is the most widely spread disease in the world [2, 4, 3]. The low level of the stomatological health among children and pregnant women influences negatively on the general health status during all periods of life and on the social and economic level of the country's development [10, 12]. The rational pharmacotherapy of paradentium inflammatory diseases as one of the main wide spread stomatological diseases in people of different age groups all over the world remains the vital question of modern pharmacy and medicine. The constant increase of the number of stomatological patients leads to necessity of searching new effective medicines [5, 6, 9].

The group of stomatological medicines requires versatile analytical study as it is constantly sustained dynamic changes in quantitative and qualitative indexes due to registration of new medicines and replenishment of the drug list of the State Register of Medicines.

Among scientific works, which are closely connected with the research direction, the works of such scientists as Z.M.Mnushko [8], L.I.Shulga [11], T.S.Beztsenna [11], O.F.Piminov [11], I.P.Mazur [7] and others are of great importance.

The aim of this work is to analyze the assortment of stomatological medicines (SMs) presented at the Ukrainian market, and it will allow to have the conception about availability of this remedies and the possibility to satisfy the basic needs in treatment.

Materials and Methods

The content-analysis, methods of statistical and mathematical analysis, as well as graphic analysis have been used in the research. The research has been conducted according to the data of the state drug registration of the «State Expert Center» state enterprise, Reference Book Compendium; Rx-Index-classification code of medicines have been used.

Results and Discussion

According to the ATC classification system, medicines for stomatological application belong to A01A

Table 1

No.	Group code	Group description -	Number of medicines	
			Total	Part,%
A01AA		Medicines for caries prophylaxis	3	3.23
1	A01AA01	Sodium Fluoride	3	3.23
	A01AB	Antimicrobial medicines for local treatment of the oral cavity	25	26,88
2	A01AB03	Chlorhexidine	1	1.08
3	A01AB11	Different medicines	5	5.38
4	A01AB12	Hexetedine	б	6.45
5	A01AB17	Metronidazol	1	1.08
6	A01AB53	Chlorhexidine, combinations	4	4.3
7	A01AB67	Metronidazol, combinations	8	8.6
A01AD		Other medicines for local treatment of the oral cavity	65	69.89
8	A01AD02	Benzydamine	2	2.15
9	A01AD11	Different medicines	63	67.74
Total			93	100

The structure of the stomatological medicines assortment according to the ATC-classification

Table 2

Country's	Country producer	Number of medicines		
rating	Country-producer	Total	Part,%	
1	Ukraine	52	55.91	
2	India	9	21.95	
3	Germany	7	17.07	
4	Poland	6	14.63	
5	France, Czech Republic	3×2=6	7.32×2=14.64	
6	Italy, Bosnia and Herzegovina, Latvia, the Netherland	2×4=8	6.45×4=25.8	
7	Russia, Austria, Canada, Bulgaria, Switzerland	1×5=5	2.43×5=12.15	
Total		93	100	

The structure of the stomatological medicines assortment at the Ukrainian market according to the countries-producers index

group. In Table 1 the ATC-classification of SMs is presented; among them medicines of A01AD group occupy the first place – other remedies for the oral cavity treatment (69.89%), namely different medicines (67.74%); the second place is A01AB – antimicrobial medicines for local treatment of the oral cavity diseases (26.88%), namely A01AB6 – metronidazol, combinations (8.6%); the third place is A01AA – medicines for caries prophylactic (3.23%) (Tab. 1).

The analysis of the SM market conducted has shown that at present 93 trade names are registered at the Ukrainian market. Among them domestic trade names -52 medicines, which is 55.91%, and 41 trademarks – medicines of foreign manufacturers (44.09%).

For further examination of the foreign SM segment used in stomatology it has been divided according to the countries-producers (Tab. 2).

It has been found that among the registered SMs, 21.95% is supplied to the Ukrainian pharmaceutical

market by the Indian producers, 17.07% – by Germany, 14.63% – by Poland, 7.32% – by France and Czech Republic.

Such domestic manufacturers (11.54%) as CJC Pharmaceutical factory «Viola» (Zaporizhia), CJC «Liktravy» (Zhytomir), OEC «Lubnipharm» (Lubni, Poltava region) and utility company of Kiyv Regional Council «Pharmaceutical factory» (Kiyv) take the leading positions in Ukraine in production of the group of SMs studied.

The next stage of analysis is to determine the ratio of medicines by the origin of their biologically active substances or their active substances. Medicines of the investigated group A01A have been divided into natural, synthetic and combined taking into account their producer. As the result of the research, it has been found that domestic producers offer medicines of the natural origin (50.54%), but appropriate quantity of foreign medicines of the group studied is 12.90%. The assort-Table 3

Medicines The total number of medicines Medicinal Domestic Foreign form Specific Specific Specific Number Number Number weight, % weight, % weight, % HMP 23 23 44.23 24.73 -Gel 3 5.77 13 31.71 16 17.2 Tablets 1 1.92 13 31.71 14 15.05 Tincture 10 19.23 10 10.75 --7 17.07 8 Solution 1 1.92 8.6 3 7 Spray 5.77 4 9.76 7.53 3 3 5.77 3.23 Drops --Extract 3 5.77 _ _ 3 3.23 2 2 _ 2.15 Aerosol 3.85 _ Pastilles 2 4.88 2 2.15 _ -2 3.85 -2 2.15 Teas _ Toothpaste 1 2.44 1 1.08 --Capsules _ 2.44 1.08 _ 1 1 Oil 1 1.92 _ _ 1 1.08 Total 52 100 41 100 93 100

Distribution of stomatological medicines according to medicinal forms



Figure. The macrocontour of the assortment of the pharmaceutical market target segment of stomatological medicines.

ment of the domestic synthetic medicines is 1.08% and the foreign production is 13.98%. The part of foreign combined medicines is 16.13% of the total number of the registered stomatological medicines, which three times increase the number of domestic medicines – 5.38%.

SMs are presented in diverse medicinal forms (Tab. 3).

It has been found that the group of herbal medicinal products (HMPs) produced in packs or sieve-packets is the largest part among domestic medicines (44.23%). The specific weight of tinctures is 19.23%.

The majority of foreign drug assortment of the group A01A studied is tablets and gels (31.71%). The least part among medicines of the foreign origin is pastes and

capsules (2.44%). It has been found that solid medicinal forms (HMPs, tablets, pastilles, capsules, teas) are the widest in the group under research. Their part is nearly half of the assortment examined -45.16%.

By the results of the situational analysis, taking into consideration the maximum characteristics of indexes, the assortment contour of the target segment of the Ukrainian pharmaceutical market (monocontour) [1] has been worked out; it is presented in Figure.

It has been found during the investigation that domestic SMs are 55.91%; the majority of domestic medicines are of the natural origin (50.54%); among them 44.23% is SMs from the medicinal plant raw material; pharmacotherapuetic group A01AD dominates – other medicines for treatment of the oral cavity diseases (69.89%); A01AD11 – different medicines (67.74%); 21.95% SMs are presented by the country – producer India.

CONCLUSIONS

1. The assortment of stomatological medicines (SMs) registered at the Ukrainian market has been analyzed according to the ATC-classification.

2. The current assortment of SMs according to the countries-producers has been investigated.

3. The analysis of SMs by medicinal forms has been conducted.

4. On the basis of the maximum indexes obtained the assortment contour of the pharmaceutical market target segment in Ukraine has been developed (macrocontour).

Further investigations should be directed to study availability of SMs.

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АНАЛИЗ АССОРТИМЕНТА СТОМАТОЛОГИЧЕСКИХ ПРЕ-ПАРАТОВ

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АНАЛІЗ АСОРТИМЕНТУ СТОМАТОЛОГІЧНИХ ПРЕПА-РАТІВ

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Досліджено асортимент стоматологічних препаратів в Україні за АТС-класифікацією та країнами-виробниками. Проаналізовані лікарські форми досліджуваних препаратів. За отриманими максимальними показниками складено асортиментний макроконтур цільового сегменту ринку.

Исследован ассортимент стоматологических препаратов в Украине в соответствии с АТС-классификацией и по странам-производителям. Проанализированы лекарственные формы исследуемых препаратов. По полученным максимальным показателям составлен ассортиментный макроконтур целевого сегмента рынка.