



Analysis of changes in market characteristics of Essential Medicines within the frames of state program of increasing availability of medicines in Ukraine

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Abstract

The article contains results of analysis of organizational economic and market characteristics of essential medicines, which were amended to the 3rd edition of the National List of Essential Medicines (215 medicines in 2009) in Ukraine during 2017. Within the frames of State program of increasing availability of medicines in Ukraine during 2017 the 3rd edition of National List of Essential Medicines was reviewed twice. The first revision (March 2017) was taking place according to the 19th WHO Model List of Essential Medicines (EM), which was not valid at that time. Only the second revision of the third edition of National List of EM (December 2017) in Ukraine was updated taking into account the 20th WHO Model List of EM. Despite of a significant increase of EM in March 2017 by 152 medicines, and in December – by 60 positions (up to 427 names), at the end of 2017 specific weight (%) of sales of the above-indicated medicines at the market increased by 6.0% (from 19.4% to 25.4%). Herewith, at the end of 2017 each third medicine, which was sold at the market in natural indicator, belonged to EM. A significant domination of native medicines is an important characteristic of the dynamic of EM realization at the market. Specific weight of their sales fluctuated in natural indicator from 79.8% to 85.4%, and from 44.2% to 46.2% – in value indicator. At the end of 2017, as compared to 2016, there was an increase of an average cost of one conventional package of EM of foreign and domestic production. One should mention that the growth rate was typical for the range of domestic EM. Average cost of specific weight of essential medicines for hospitals amounted to 55.43% in natural indicator and 46.07% - in value indicator. By the results of allocation of pharmacological therapeutic groups of EM by the specific weight of their purchases for hospitals the following fact was found out. Six pharmacological therapeutic groups by natural indicator were included to the 1st category of groups (75.0% and more hospital purchases fall on EM – “High level of meeting the need in EM”), and by the value indicator – only one (P-Antiparasitic products, insecticides, and repellents). One of the disadvantages is availability in the list of the 1st and 2nd groups (from 50.0% to 75.0% – “Average level of meeting the need in EM”) of EM out of socially-important groups of medicines. They are groups of J-Anti-infectives for systemic use and L-Antineoplastic and immunomodulating agents. Herewith, the availability of EM out of C-Cardiovascular system in the list of the fourth (less than 25.0% of hospital purchases (“Low level of meeting the need in EM”) by value indicator and the third (from 25.0% to 50.0% of hospital purchases (“Average level of meeting the need in EM”) of the category by natural indicator seems to be problematic.

Keyword: National Drug Policy, National list of Essential Medicines of Ukraine, Model list of Essential Medicines, state program “Available medicines”, Ukraine, World Health Organization.

INTRODUCTION

For the recent decades, enormous changes in all spheres of social life have taken place. Significant changes were observed in social way of thinking by the following basic categories: “health” and “human life”, and “social equity”. A year after (1977) the implementation of the first edition of WHO Model List of Essential Medicines (EML) at the Alma-Ata conference (1978) in practical health care and pharmacy, the following strategic trends of development of world society regarding the formation of basic values of the country, despite of the level of its political and social economic development, have been defined. Thus, it was mentioned that health and life of the human being have the highest social value, and equal access of the population to efficient medical sanitary aid and essential medicines is the most important social goal of national systems of health

care and the country in general [1,2]. Principles of social equity and equal access of people, despite of their social status in the society, to efficient medical and pharmaceutical aid, which were declared at the Alma-Ata conference (1978), determined the main principles of development of the world sector of health care a century ahead [3,4]. For more than 40 years’ international organizations have efficiently developed and used numerous projects and programs, their key goal was to increase the level of availability of medicines and pharmaceutical services for the population in different countries [4-6]. Despite of great efforts of the World Health Organization (WHO) and other authorized international organizations of most developing countries, the level of availability of the so-called “Essential medicines” (EM) still remains unsatisfactory [5,7-9]. In special references it

was stated that almost 10 million people's life in the world could be saved taking measures to increase physical and social economic availability of EM. Herewith, four million people live in the countries with a low level of economic development, first of all, in Africa and Southern-Eastern Asia [10].

In May 2016 a report "Addressing the global shortage of, and access to, medicines and vaccines" was presented at the Sixty-ninth World Health Assembly, which revealed the problem of insufficient level of availability of EM and vaccines stating that it should be reviewed at all levels of health care and national system of health care in particular [11]. It was mentioned as well that there are significant disproportions in the process of development, promotion and formation of an equal access of the population to EM [5,7]. It creates dangerous tendencies in the development of the whole spectrum of social relations between people and some groups of the society. According to this report, 90.0% of the population of the developing countries has to buy medicines for their own money. As a result, expenses for medicines take the second place after food expenses in family budget [11]. Finally, a significant number of families in the countries with a low income do not have qualified medical aid and essential medicines [5,7-9]. Ukraine is not an exception. Under the condition of political and social economic crises, which is observed in Ukraine during the last years, the population has to buy medicines for their own money 90.0-100.0% of medicines in case of staying in the hospital and over 60.0% of medicines – for outpatient use [12,13]. The problem of increasing the level of availability of EM for the population is urgent in Ukraine for the last years at the background of catastrophic impoverishment of the population [12,14]. To solve this problem, in 2017 our government made a decision to introduce the program of "Available medicines" [12,15]. The goal of this program was to cover part of expenses for medicines used for cardio-vascular pathologies, 2nd type diabetes and bronchial asthmas [12,14,15]. Except for the implementation of the program of "Available medicines", one of the important ways of regulation availability of pharmaceutical services in the country was to improve efficiency of implementation of international concept of EM [13,14]. At the background of realization of the huge state program of "Available medicines" it became necessary to review the third edition of the National List of EM (National List of Essential Medicines №3). Therefore, two updated lists of EM №3 were confirmed in Ukraine only in 2017. Taking into account a special social and medical pharmaceutical importance of efficient realization of state program of "Available medicines", it is appropriate to analyze economic and market changes of EM, which were amended to the List of EM in 2017.

MATERIALS AND METHODS

To conduct a research of changes of organizational economic and market characteristics of EM, which were updated in the National List of EM №3 in 2017, we determined the following criteria of analysis: specific weight of EM sales (%) at the pharmaceutical market of Ukraine; specific weight of domestic medicines (%) in the

total realization of EM; average cost of one package of EM in national currency (UAH) and US dollars; specific weight of EM sales (%) in hospitals according to the first level of The Anatomical Therapeutic Chemical (ATC) Classification System of medicines. All necessary indicators have been calculated according to the date of confirmation of amendments to the National List of EM №3 (March and December 2017). EM sales indicators have been investigated according to the data of monitoring of the Pharmaceutical market of Ukraine at the end of 2016, which were amended to the National List of EM №3. We have analyzed indicators with the help of the chain growth rate (%) and increase rate (%), and also some structural changes of specific weight (%) of the appropriate analysis indicators in general. The required calculation of value indicator of EM sales, which was performed in national currency (UAH) and US dollars, was done according to the data from official website of the National Bank of Ukraine at the date of revision [16].

According to the goal of research and taking into account important social economic value of the results obtained during formation of rational mechanisms of pharmaceutical provision of the population in the national system of health care, we analyzed data taken from different informational Sources. First of all, these are data taken from the official website of WHO, Ministry of Health of Ukraine and the government portal [13,15,17,18]. Secondly, we used data of analytical system of "PharmExplorer"/"Pharmstandard" pharmaceutical market investigation conducted by "Proxima Research" Company, which are presented in open informational sources [19,20].

In the research we used dialectical, historical, comparative, systematic, structural functional, mathematical statistical and other methods of scientific knowledge and searching. We delivered statistical processing of all intermediate indicators with the help of up-to-date computer software and standard methodologies of variation statistics. Thus, all statistical calculations were performed using the statistical package StatSoft. Inc. (2014). STATISTICA version 12.0, and Excel spreadsheet. A p-value <0.05 was considered as statistically significant.

RESULTS AND DISCUSSIONS

Implementation of the international concept of EM in Ukraine may be characterized as a complicated process, which was taking place under the conditions of absence of a precise vision of the development of a social sphere of health care and national medicine in general. One of the best examples is the National List of EM №3 of Ukraine, which has not been updated since 2009. During this time, four editions of WHO EML were developed and updated at the official website of WHO, namely the 17th WHO EML and the 3th WHO Essential Medicines List for Children (March 2011), 18th WHO EML and the 4th WHO Essential Medicines List for Children (April 2013), 19th WHO EML and the 5th WHO Essential Medicines List for Children (April 2015) and 20th WHO EML (March 2017, amended August 2017) and the 6th WHO Essential Medicines List for Children (March 2017, amended August 2017) [21-23].

Significant changes in the national system of health care of Ukraine started only in 2015 and continued up till present. The process of implementation of the international concept of EM in Ukraine was constantly developing based on the state program of “Available medicines” for cardio-vascular pathologies, diabetes, bronchial asthma, and with the implementation of transparent mechanisms of state purchasing of medicines. With the reformation of Ukrainian system of pharmaceutical provision, to increase the level of EM availability for the population it became necessary to review National List of EM №3. As it was previously mentioned, National list of EM №3 was amended twice during 2017. Thus, the first amendments of the National List of EM №3 were made by the Decree of the Cabinet of Ministers of Ukraine dated from 16.03.2017 (valid from 01.06.2017), and the second one – at the end of the year by the Decree of the Cabinet of Ministers of Ukraine dated from 13.12.2017 (valid from 30.12.2017) [24].

It is worth mentioning that the first amendment of the List was made according to the 19th WHO EML and the 5th WHO Essential Medicines List for Children (April 2015), and the second one – according to the requirements of current 20th WHO EML (March 2017, amended August 2017) and the 6th WHO Essential Medicines List for Children (March 2017, amended August 2017). Paradoxically, but this is the fact that the first amendments to the WHO EML №3 were made (March 2017) in the composition of the 19th WHO EML and the 5th WHO Essential Medicines List for Children (April 2015). The second edition of the National List of EM №3 was made in December 2017. This List of EM was updated in the currently existing edition of the 20th WHO EML (March 2017, amended August 2017) and the 6th WHO Essential Medicines List for Children (March 2017, amended August 2017). Results of comparative analysis of specific weight of EM, which were amended to the National List of EM

№3 (2009) and its two updated versions (March and December 2017) are shown in Figure 1.

As we see, dynamic of specific weight (%) of EM at the Ukrainian pharmaceutical market during 2016-2017 had a complicated character. Thus, at the background of increase of the number of EM, which were amended to the updated National List of EM №3 from 215 medicines (2009) to 367 medicines (increase of indicator +71,15% in March 2017), there was a decrease (%) of EM packages from 27.5% to 24.5% (structural change of indicator -3,0%) at the pharmaceutical market. There was an increase of specific weight of EM only by +0.9% in value.

Thus, the number of names of EM was increased by 71.15%, and the increase of their sales at the pharmaceutical market did not reach 1.0%. At the end of 2017 after the revision of the second edition of National List of EM №3, which contained 427 medicines (increase +16,35%), there was an increase of their specific weight at the pharmaceutical market both in natural and value indicators. Thus, specific weight of packages of EM sold at the market increased by 30.2%, and in value – by 25.4%. So, we can state about the acceleration of market positions of medicines at the end of 2017, which have social economic significance for the society. To our mind, this is the result of regulation of the whole set of legislative acts connected with state regulation of prices at the pharmaceutical market. Moreover, till the end of 2017 a number of important issues have been confirmed regarding the participation of subjects of pharmaceutical market in state purchase of medicines, and in the program of “Available medicines” as well. First of all, state purchases for hospitals and state program of pharmaceutical provision of some groups of patients and categories of population should be conducted taking into account the National List of EM [15,24].

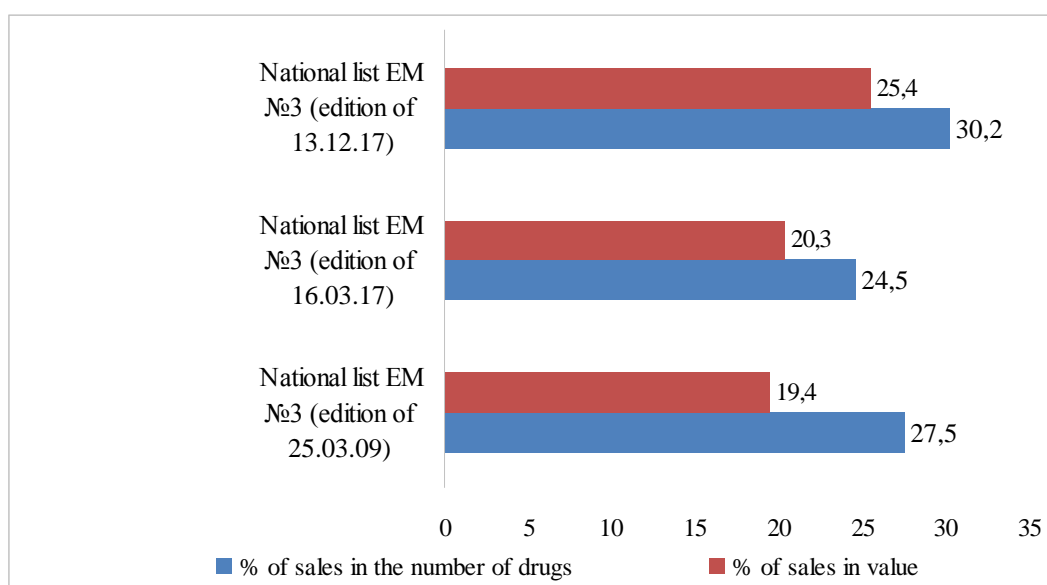


Figure 1: Analysis of sales of EM %, which were amended to the National List of EM №3 at the pharmaceutical market of Ukraine.

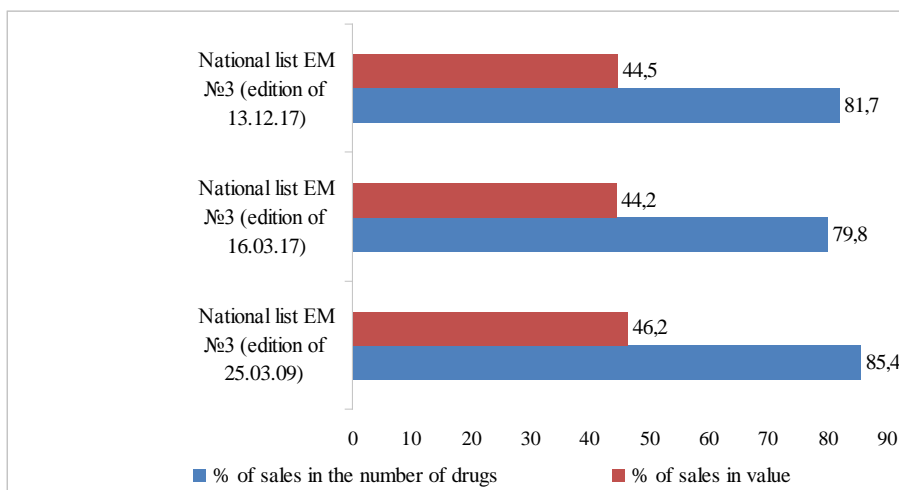


Figure 2: Analysis of sales (%) of domestic EM at the pharmaceutical market of Ukraine

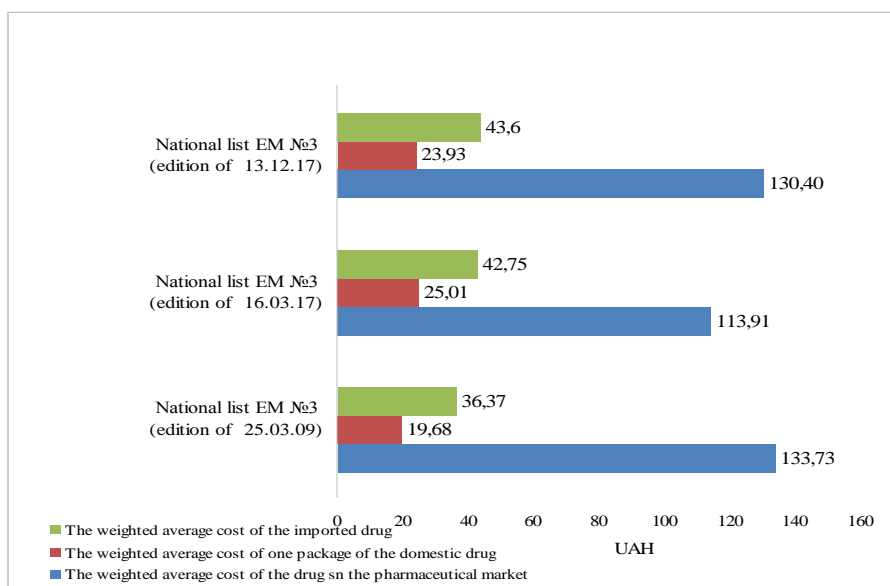


Figure 3: Analysis of changes of average cost of one conventional package of EM, which were amended to the National List of EM in Ukraine in national currency

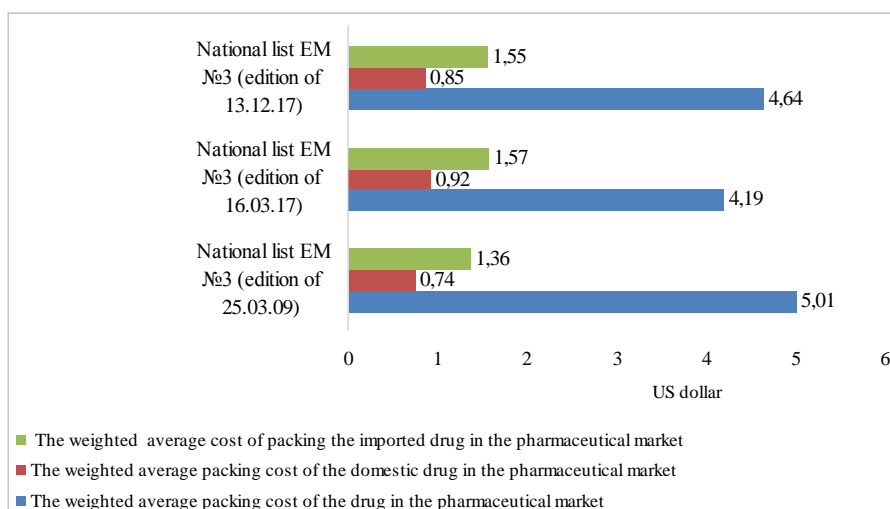


Figure 4: Analysis of changes of average cost of one package of EM, which were amended to the National List of EM in Ukraine in US dollars.

Next significant indicator, which is important on the way to the implementation of the international concept of EM, to our mind, is specific weight of local EM in total sales of the country. Results of the analysis by the specific parameters of research are shown in Figure 2.

It was determined that in natural indicator the above-stated indicator fluctuated from 79.8% to 85.4%, and in value – from 44.2% to 46.2%, despite of the smallest number of medicines (215 names), which was performed at the National List of EM №3, confirmed 25.03.2009, the sales volume of EM at the end of 2016 was the highest at the pharmaceutical market both in natural and value indicators. At the beginning of 2017, as the number of medicines of the National List of EM №3 (amended after 16.03.2017) increased up to 367 names (increase of the number of medicines +70.1%), the specific weight of their sales decreased both in natural and value indicators. Herewith, it is worth saying that during the whole research almost every second medicine, which was sold (in value indicator) from the National List of EM №3, was produced at the domestic market. The fact that in natural indicator local EM dominate in the structure of EM sales at the pharmaceutical market researched during the whole period of time.

Taking into account the importance of price range of medicines, which belong to the national List of EM №3, the next indicator, which was necessary to analyze was the average cost of one conventional package of EM in national currency (UAH) and in US dollars (Figure 3).

Average cost of one package of imported EM has been increasing gradually during the whole period of time. Thus, at the beginning of 2017 the above-mentioned indicator increased, as compared to 2016, from 36.37 UAH to 42.75 UAH (+17.54%), and at the end of the year increased by 2.0% and reached 43.60 UAH. Average cost of one conventional Package of domestic EM had a complicated dynamic of changes by its character. Thus, at the beginning of 2017 (the first amendment of the National List of EM №3) the cost of one package of one conventional package of EM increased, as compared to 2016, by 27.1% and amounted to 25.01 UAH, and at the end of 2017 (the second amendment of the National List of EM №3) reduced by 4.32% (23.93 UAH).

It is worth mentioning that dynamic of changes of the average cost of one conventional package of domestic EM met the tendency of changes of the same indicator in general by the whole range of medicines, which were sold at the pharmaceutical market during 2016 (December) – 2017 (December). As we see, imported and domestic EM had different character of changes of average cost of one conventional package in national currency.

Taking into account a significant dependence of domestic pharmaceutical market on imported drugs, it is interesting to analyze changes of the average cost of one conventional package of EM in US dollars. Results are shown in Figure 4.

It is interesting to know that the average cost of one conventional package of domestic and imported EM in US dollars, as compared to UAH, has similar character of changes of indicators. That is, at the beginning of 2017 (first amendment of the National List of EM №3) there was

an increase of imported EM by +15.44%, and domestic medicines – by +24.32%). At the end of 2017 as compared to March 2017 the above-stated indicators reduced, which means positive characteristics of development of the process defined. By imported range of EM there was a decrease, which amounted to 1.27%, and by domestic range – 7.61%.

The comparative analysis of indicators of average cost of one conventional package of EM during 2016-2017, both in national currency and US dollars, allows stating the following. By domestic and imported range of EM, their price increased both in national currency and US dollars. Herewith, it is worth mentioning that growth rate indicators by the domestic range were much higher than the range of imported EM both in national currency and US dollars. By the domestic range, the increase of indicators of average cost of one conventional package of domestic EM in UAH amounted to +21.60%, and in US dollars – +14.87%. For imported range the above-stated indicators amounted to +19.88% (UAH) and +13.98% (US dollars). In general, one can state that during the year of changes in the National List of EM №3, which took place in Ukraine, pricing characteristics of medicines, which have medical pharmaceutical and social economic value for a society, has not changed significantly.

Analysis of EM sales in the hospitals performed in the existing National List of EM №3 has become an important area of our research taking into account pharmacological therapeutic groups according to the first level of ATC Classification System. The necessity to conduct a research in the above-mentioned direction was caused by the fact that according to the procedures of the Decree of the Cabinet of Ministers of Ukraine № 333 (item 1.1) dated from 01.01.2018 all institutions of health care financed from state or local budgets of Ukraine (hospitals) should purchase only those medicines, which are included to the National List of EM. And only if there is a 100% need to buy the above-stated medicines, health care institutions can purchase other medicines registered in Ukraine from the state budget [24]. Peculiarity of hospital segment of health care in Ukraine is that patients in the hospitals should be treated from state or local budgets. According to the data from special informational sources, in 2016 volume of EM purchases for hospitals amounted to 59.4 million packages, which in value indicator was 4.2 milliard UAH or 150 million US dollars [19]. Let's analyze the data performed in Table 1.

As we see from Table 1, specific weight (%) of EM purchases in total hospital purchases from state budget for hospital patients for different groups of ATC-classification fluctuated in a wide range of value. Average specific weight of EM purchases in total hospital purchases in natural value amounts to 55.43%, and in value – 46.07%. That is, almost half of medicines financed by the government were amended to the National List of EM №3. Next, by analyzing the above-mentioned indicator we have developed a scale of pharmacological therapeutic groups, which have EM financed by the government.

Table 1. Analysis of specific weight of EM purchases of different pharmaceutical groups in total hospital purchases.

Name of group	Specific weight (%) of EM cost in total hospital purchases		Compound rating by EM purchases (place in the rating)	
	Natural indicators (thousand of packs)	Value indicators (UAH)	Natural indicators (thousand of packs.)	Value indicators (UAH)
A-Alimentary tract and metabolism	50,97	36,07	IX	VIII
B-Blood and blood forming organs	71,13	56,98	V	V
C-Cardiovascular system	36,86	19,78	X	XIII
D-Dermatologicals	62,14	19,75	VII	XIV
G-Genito urinary system and sex hormones	9,05	29,69	XIV	XI
H-Systemic hormonal preparations, sex hormones and insulins	90,34	32,15	I	X
J-Anti-infectives for systemic use	77,23	65,16	IV	III
L-Antineoplastic and immunomodulating agents	65,78	61,86	VI	IV
M-Musculo-skeletal system	36,44	27,85	XI	XII
N-Nervous system	59,05	54,87	VIII	VI
P-Antiparasitic products, insecticides, and repellents	83,21	86,33	II	I
R-Respiratory system	25,31	34,31	XIII	IX
S-Sensory organs	27,42	49,04	XII	VII
V-Various	82,87	71,05	III	II

Table 2. Results of division of pharmaceutical groups of EM financed by the government for hospitals

Division of pharmacotherapeutic groups into categories (% of EM purchases for hospitals) by natural indicator			
75.0% and more	From 50.0 to 75.0%	From 25.0% to 50.0%	Less than 25.0%
B-Blood and blood forming organs	A-Alimentary tract and metabolism	C-Cardiovascular system	G-Genito urinary system and sex hormones
D-Dermatologicals	L-Antineoplastic and immunomodulating agents	M-Musculo-skeletal system	
H-Systemic hormonal preparations, sex hormones and insulins	N-Nervous system	R-Respiratory system	
J-Anti-infectives for systemic use		S-Sensory organs	
P-Antiparasitic products, insecticides, and repellents			
V-Various			
Division of pharmacotherapeutic groups into categories (% of EM purchases for hospitals) by value indicator			
P-Antiparasitic products, insecticides, and repellents	B-Blood and blood forming organs	A-Alimentary tract and metabolism	C-Cardiovascular system
	J-Anti-infectives for systemic use	G-Genito urinary system and sex hormones	D-Dermatologicals
	L-Antineoplastic and immunomodulating agents	H-Systemic hormonal preparations, sex hormones and insulins	
	N-Nervous system	M-Musculo-skeletal system	
	V-Various	R-Respiratory system	
		S-Sensory organs	

The place in the rating was conferred in the order of reducing specific weight of the indicator for hospital purchases. By natural indicator (thousand of packages), medicines from the group of H-Systemic hormonal preparations (90.34%) are leaders in the structure of drugs purchases, the second place is given to medicines from the group of P-Antiparasitic products, insecticides, and repellents (83.21%), and the third place is performed by EM from V-Various group (82.87%). By value indicator, essential medicines from the group of P-Antiparasitic products, insecticides, and repellents (86.33% – 1st place in

the scale), V-Various group (71.05% – 2nd place in the scale) and from the group of J-Anti-infectives for systemic use (65.16% – 3rd place in the scale) were group-leaders. The smallest value of specific value in the structure of hospital purchases in natural value was given to EM from the group of G-Genito urinary system and sex hormones (9.0%), and in value indicator – EM from the group of C-Cardiovascular system (20.0%). It is worth mentioning that EM from the group of H-Systemic hormonal preparations, sex hormones and insulin by the indicator % thousand of packages financed by the

government took the 1st place in the scale, and in the structure of purchases in value indicators – only 10th place. It can be explained by low prices for medicines performed in the above-indicated group and increase of sales of domestic medicines. Taking into account medical pharmaceutical and social economic significance of rational use of EM financed by the government, we divided all groups of EM into 4 categories. The first category called “High level of meeting the needs of EM” consisted of the groups of EM, which made up 75.0% and more of hospital purchases. The second group called “Medium level of meeting the needs of EM” – from 50.0 to 75.0 %, the third category called “Satisfactory level of meeting the needs in EM” – from 25.0% to 50.0%, and all other groups (less than 25.0%) made up the last category of medicines called “Low level of meeting the needs in EM”. Grouping EM medicines is performed in Table 2. As we see, by the volume of EM purchases (%) in total hospital purchases in natural indicator 6 groups were included to the 1st category, and by value indicator – only one (P-Antiparasitic products, insecticides, and repellents). 3 groups of EM purchases were included to the 2nd category in natural indicator, and 5 pharmacological therapeutic groups – by value indicator. Less than half of hospital purchases (3rd and 4th categories) in natural indicator was given to EM from the 4th group, and in value indicator – 8 out of 14 groups. It is positive to have in the 1st and 2nd categories of division of pharmacological therapeutic groups of medicines, which were performed in the groups like L-Antineoplastic and immunomodulating agents, and L-Antineoplastic and immunomodulating agents.

Herewith, availability of EM from the group of C-Cardiovascular system seemed to be very problematic in the fourth category (“Low level of meeting the needs in EM” – less than 25.0% of hospital purchases) by value indicator and the 3rd group category (from 25.0% to 50.0%) by natural indicator of purchases. Thus, we can make a conclusion that despite of the fact that more than half of hospital purchases are EM, some groups of drugs, which have important medical pharmaceutical and social economic value, have a low level of meeting the needs of hospital sector of health care. First of all, medicines from these groups are used for treatment of socially-important pathologies or complicated, life-threatening diseases. Taking into account the fact that National List of EM and its edition should contain medicines that meet pharmacological economic parameters of their rational treatment, we can make the following decision. Availability of EM from such an important group as C-Cardiovascular system in the fourth category “Low level of meeting the demands in EM” and the third category “Low level of meeting the needs in EM” of division of pharmacological therapeutic groups, creates objective consequences as to irrational use of state budget in the hospital sector of health care in Ukraine.

Analyzing National List of EM №3 in the first edition (16.03.2017) with the composition of 19th WHO EML and the 5th WHO Essential Medicines List for Children (April 2015), we determined the following. In the first National

List of EM №3 amended in 2009, 54 names of EM have not been included from 19th WHO EML. Herewith, the updated National List of EM of Ukraine included 16 medicines, which were not amended in 19th WHO EML. For example, they are Hydromorphone, Oxycodone, Terizidone, Ofloxacin, Moxifloxacin, Nadroparin, Dalteparin, Deferasirox, Dextran 1, Dextran 40, Atenolol, Glibenclamide, Homatropine hydrobromide, Cyclopentolate, Buprenorphine. It is worth mentioning that the above-mentioned medicines from the National list of EM №3 were included to the list as they could be recommended for use as alternative drugs for medicines performed in 19th WHO EML. For example, Moxifloxacin can be used as an alternative to Ofloxacin, Oxycodone to Morphine etc. [17]. Moreover, as compared to 19th WHO EML, in the National List of EM №3 updated in March, the requirements as to the form of manufacturing and doses for more than 70 names of drugs were significantly increased. The composition of the National List of Essential Medicines №3 updated in December 2017 and valid at present met the requirements of the 20th WHO EML (March 2017, amended August 2017) and the 6th WHO Essential Medicines List for Children (March 2017, amended August 2017). Так, 60 names of drugs were amended to the National list of EM №3 in Ukraine. Herewith, 18 names of drugs were amended to the updated edition of the National List of EM №3 according to the requirements of 20th WHO EML. An important innovation in the process of regulation of EM at the pharmaceutical market of Ukraine is the availability of medicines, which are used in palliative medicine and for first aid.

CONCLUSION

Making a systematic analysis, we can state the following. During the last years a lot of work was done to reach the key goals of National Drug Policy according its main directions in Ukraine in order for the population to have an equal access to qualitative, rational and available medicines. The urgent issues of the increase of availability of EM for all spheres of population are being gradually solved in Ukraine despite of financial and social economic crises in our society [14,15,20]. A state system of providing qualitative medicines has been built and is currently functioning in Ukraine, which is an example for many countries, which are developing on the grounds of the former USSR [25]. Ukraine signed most international conventions dealing with the development of a social sector of health care using the principles of equal access of the population to qualitative and available medicines [12,13,25]. The implementation of the concept of EM seems to be an important and integral part of the global process of sharing the ideas of humanism and rational use of limited resources of health care. Herewith, it is worth mentioning that the process of development and updating of the National List of EM №3 has a complicated character and depends on the whole set of external and internal factors. On the way to the construction of socially-responsible sector of health care, one should fulfill a number of tasks. First of all, using the existing WHO EML for the appropriate date of updating by qualitative and

quantitative indicators should be the priority in the process of making amendments to the National List of EM of any edition. Secondly, normative-legal status of the National List of EM №3 in Ukraine should satisfy the whole set of legislative acts, which regulate pharmaceutical provision of the population by different directions (State program “Available medicines”, drugs purchasing, provision of medicines for orphan pathologies, tuberculosis, AIDS and HIV-infected patients etc.). Thirdly, unfortunately, in Ukraine there are no precise normative-legal norms and a transparent procedure of the order of inclusion these or those drugs to EM, except for those cases when a medicine was amended to the updated edition of WHO EML. According to the data of public registration of medicines in Ukraine it is recommended for the operators of pharmaceutical market to form a National List of EM by the trade names of drugs at a certain date and time with appropriate software. A formation of precise, balanced and consistent policy in health protection is an important requirement for the efficient solution of all issues stated above. This policy should not solve conjectural and populist issues, which are submitting nowadays, but to assist with the formation of equal and financially-motivated conditions of availability of different layers of population to efficient medicines, which have significant medical pharmaceutical and social economic value.

Conflict of interest:

The authors declare that they have no conflict of interest to disclose.

Contributing authors:

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