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ANALYSIS OF THE DRUG ASSORTMENT FOR TREATING NICOTINE DEPENDENCE PRESENTED AT THE PHARMACEUTICAL MARKET OF UKRAINE

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Key words: marketing research; assortment; medicines for treating nicotine dependence; nicotine addiction

The analysis of the drug assortment for treating nicotine dependence presented at the Ukrainian pharmaceutical market has been carried out according to the ATC-classification and countries-producers with the purpose of providing the population with effective, qualitative and safe medicines. Two types of therapy are used for nicotine addiction: nicotine replacement therapy and therapy with the use of medicines, which do not contain nicotine. In the process of our investigations it has been found that 11 trade names (TD) of medicines for treating nicotine dependence (MTND) have been registered in Ukraine. Among them there are 8 nicotine-containing drugs, 1 medicine contains cytisine, 1 includes varenicline and 1 is a homeopathic medicine produced by 5 countries. It has been determined that the majority of medicines for treating nicotine dependence are presented by foreign producers at the Ukrainian market. The majority of the drug assortment for treating nicotine dependence is imported drugs of such pharmaceutical companies as McNeil, AB (Sweden); Novartis Consumer Health, S.A. (Switzerland); Sopharma (Bulgaria), Pfizer (the USA). The analysis of medicines for treating nicotine dependence has been carried out by medicinal forms. Medicines for treating nicotine dependence are presented at the market of Ukraine in such forms as chewing gums, tablets, transdermal plasters, granules. According to the maximum indexes received the assortment contour of the target segment of the Ukrainian pharmaceutical market of MTND (macrocontour) has been developed. The macrocontour of the target market segment can be used for studying the assortment of a particular chemist's shop with the purpose of possibility of the assortment extension.

Harmful consequences of tobacco use have been already proven. But there are a lot of people, who either do not know about them or do not want to give up this bad habit or can not do it. Sociological investigations testify that the major part of smokers (60-70%) are trying to give up this bad habit. However, according to the narcologists' opinion, nicotine addiction may be as strong as heroin addiction [2, 15].

Smoking consequences represent a great danger to humanity even more than AIDS, tuberculosis, maternal mortality, traffic accidents, suicides and murders taken together [5, 9].

Due to predictions of scientists at the University of Edinburgh (Britain) if nicotine consumption does not change the present rate, this figure will reach 10 million by 2030. Totally nicotine will kill about one billion of people in the XXI-st century [3].

According to the World Health Organization, Ukraine sets the 17-th place among all countries as to nicotine consumption. It is 1.5% of all cigarettes in the world, while the population of Ukraine is not more than 0.85% of the Earth population. There are about 9 million of active smokers in Ukraine. They are the third of all population capable to work. This is a great number of people, their health can be improved without material costs involvement by having influence only on one factor – smoking. Therefore, nicotine control is one of the major problems in our country [8, 14, 15].

One of the ways to help smokers to get rid of nicotine dependence is taking medicines for treating nicotine dependence (MTND). It is reasonable to conduct the marketing research of the MTND market segment. The results of these investigations give the opportunity to determine availability and the level of providing with such medicines, as well as the tendency for market development of the medicines under research.

Among the scientific works closely connected with the research direction, there are significant works of such scientists as Z.M.Mnushko [7], I.V.Pestun [7], V.K.Smirnov [11], O.I.Yermolova [11], O.I.Speranska [11], S.K.Zyryanov [15], Yu.B.Belousov [15] and others.

The aim of this work is to research the domestic market of MTND for further study of availability of these medicines and possibility of demand satisfaction in nicotine dependence treatment.

Materials and Methods

Monitoring over the situation at the market has been conducted on the basis of official sources content analysis as to drugs, which help to give up smoking: the State Register of medicines of Ukraine, Compendium 2013, Rx-Index classifier of drugs.

Results and Discussion

Nicotine is the major smoking pathological factor. It is a colourless and odourless alkaloid, which is part of *Solanaceous* family, mainly tobacco [4]. The name “nicotine” comes from the Latin word “*nicotina tabacum*”

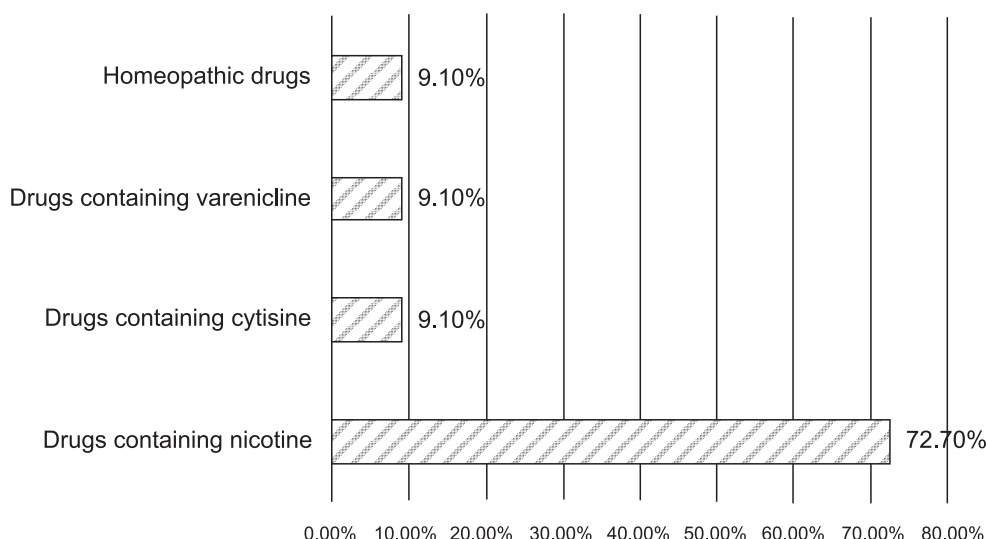


Fig. 1. The Ukrainian market of medicines for treating nicotine dependence by active substances.

received its name from the family name of a French ambassador Jean Nicot, who brought tobacco seeds and leaves to France in the middle of the XVI-th century [6, 13].

At present the Ukrainian drug market is presented by domestic and foreign producers of MTND. But the choice must be determined by the convenience of a medicinal form, economic availability and efficiency for a specific patient. Two types of therapy are used for nicotine addiction: nicotine replacement therapy and therapy with the use of medicines, which do not contain nicotine.

The main conception based on the stage-by-stage analysis of the MTND assortment has been used according to the following criteria: the ATC-classification (anatomic-therapeutic-chemical classification), medicinal forms, country and company-producer [1, 10]. According to the results of analysis the assortment macrocontour of the target market segment has been composed in order to satisfy the demand in medicines for

treating nicotine dependence. The period of analysis was 2013.

In total 11 trade names (TD) of medicines for treating nicotine dependence have been selected during the content analysis [10, 12]. Among them there are 8 nicotine-containing drugs (72.7%), 1 medicine contains cytisine (9.1%), 1 includes varenicline (9.1%) and 1 is a homeopathic medicine (9.1%) produced by 5 countries (Fig. 1).

About 3/4 of medicines at the market are nicotine-containing drugs, which are represented by foreign producers and manufactured in two medicinal forms: 75% nicotine-containing drugs in the form of a chewing gum, 25% – as a transdermal plaster.

During the analysis it has been found that the most MTND at the Ukrainian market are presented by foreign producers (91%).

The majority of the drug assortment for treating nicotine dependence is imported drugs of such pharmaceu-

Table

The firm structure of the Ukrainian market of drugs for treating nicotine dependence

Country	Manufacturer	Trade name of the drug	The number of trade names		Medicinal form
			Abs.	Share, %	
Nicotine replacement therapy					
Sweden	McNeil, AB	Nicorette with a mint flavour	6	54.5	chewing gum
		Nicorette with the taste of fresh mint			chewing gum
		Nicorette, winter mint			chewing gum
		Nicorette with the taste of fresh fruit			chewing gum
		Nicorette, flavoured mint			chewing gum
		Nicorette transdermal patch			transdermal patch
Switzerland	Novartis Consumer Health, S.A.	Nicotinell with a mint flavour	2	18.2	chewing gum
		Nicotinell transdermal patch			transdermal patch
Medicines that contain no nicotine					
Bulgaria	Sopharma	Tabex (cytisine)	1	9.1	tablets
USA	Pfizer (USA)	Champix (varenicline)	1	9.1	tablets
Ukraine	"National Homoeopathic Society" JSC	Tabacum-Plus (varenicline)	1	9.1	granules
		Total: 11			

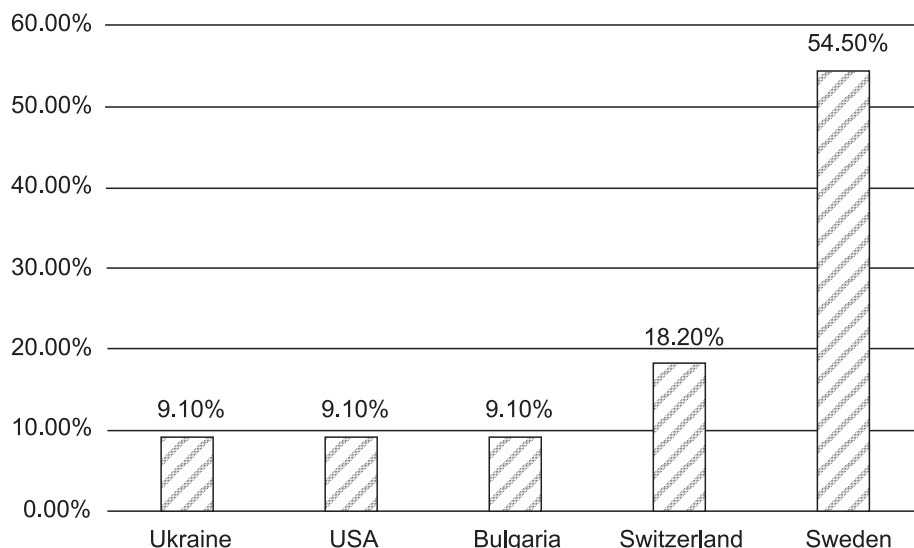


Fig. 2. The structure of the commodity market of drugs treating nicotine dependence registered in Ukraine by countries-producers, %.

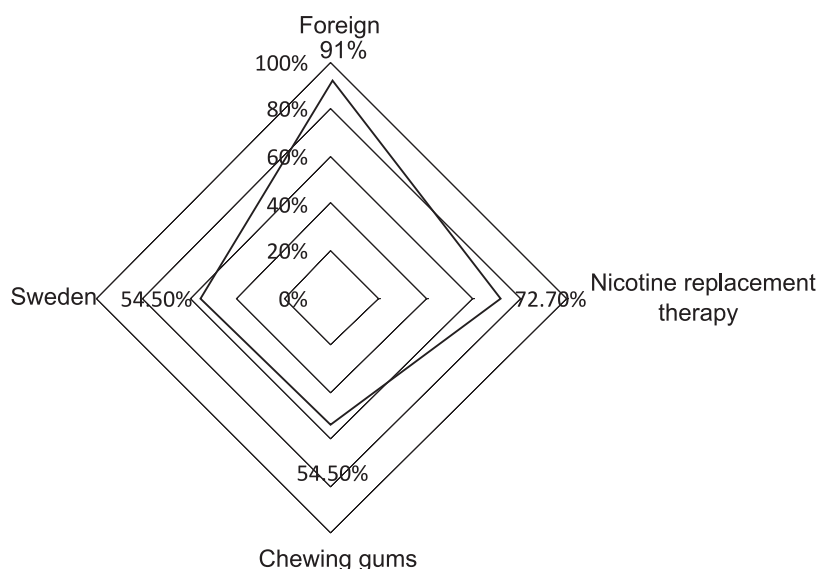


Fig. 3. The assortment macrocontour of the target segment of the pharmaceutical market of MTND.

tical companies as McNeil, AB (Sweden) – 54.5%; Novartis Consumer Health, S.A. (Switzerland) – 18.2%; Sopharma (Bulgaria) and Pfizer (the USA) – 9.1% (Table).

Distribution of medicines registered for treating nicotine dependence among the countries-producers is shown in Fig. 2. Unfortunately, the share of a domestic producer is only 9.1%.

Medicines for treating nicotine dependence are presented at the Ukrainian market in such medicinal forms as tablets, chewing gums, transdermal plasters, granules. Nicotine-containing drugs are produced in the form of chewing gums (54.5%) and transdermal plasters (18.2%) and provide modified nicotine release. Other medicines are produced in the form of tablets (18.2%) and granules (9.1%) (Table).

According to results of the analysis the assortment contour (macrocontour) of the target segment of the Ukrainian pharmaceutical market has been developed taking into account the maximum index-characteristics [1] (Fig. 3).

Information received on the basis of the macrocontour allows to form the chemist's assortment policy depending on the available proposal and demand for these medicines.

Thus, in the process of our research it has been found that foreign MTND are 91%, the majority of foreign medicines are nicotine-containing drugs (72.7%), among them 54.5% of medicines are presented in the form of a chewing gum and are produced by Swedish companies-producers.

The marketing data of the domestic market analysis of medicines for treating nicotine dependence are the basis for further prediction and can be used by chemist's and pharmaceutical companies with the purpose of development of variants for their strategy of development, goods assortment and the influence on the consumers' behaviour.

CONCLUSIONS

1. The assortment of MTND registered at the Ukrainian market has been analyzed according to the ATC-classification. Eleven trade names of medicines for treating nicotine dependence have been registered in Ukraine.

2. The assortment of MTND available in Ukraine has been investigated by countries-producers. The majority of MTND at the market of Ukraine is presented by foreign producers (91%).

3. Analysis of MTND has been carried out by medicinal forms. Medicines for treating nicotine dependence are presented at the market of Ukraine in such forms as chewing gums (54.5%), tablets (18.2%), transdermal plasters (18.2%), granules (9.1%).

4. According to the maximum indexes received the assortment contour of the target segment of the Ukrainian pharmaceutical market of MTND (macrocontour) has been developed. The macrocontour of the target market segment can be used for studying the assortment of a particular chemist's shop with the purpose of possibility of the assortment extension.

It is reasonable to carry out further investigations for studying MTND availability.

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АНАЛІЗ АСОРТИМЕНТУ ПРЕПАРАТІВ, ЩО СПРИЯЮТЬ ВІДМОВІ ВІД ТЮТЮНОПАЛІННЯ, ПРЕДСТАВЛЕНИХ НА ФАРМАЦЕВТИЧНОМУ РИНКУ УКРАЇНИ

М.М.Кобець, Ю.М.Кобець

Ключові слова: маркетингові дослідження; асортимент; препарати, що сприяють відмові від тютюнопаління; нікотинова залежність

З метою забезпечення доступності населення до ефективних, якісних та безпечних лікарських засобів проведено аналіз асортименту представлених на фармацевтичному ринку України препаратів, що сприяють відмові від тютюнопаління, за АТС-класифікацією та країнами-виробниками. При нікотиновій залежності використовують 2 види терапії: нікотинозамісну терапію і терапію з використанням лікарських засобів, що не містять нікотину. У ході досліджень встановлено, що в Україні зареєстровано 11 торгових назв препаратів для лікування нікотинової залежності, серед яких 8 нікотинівмісних препаратів, (1 препарат містить цитизин, 1 – вареніклін та 1 гомеопатичний препарат), що випускаються 5 країнами-виробниками. Встановлено, що більшість препаратів, які сприяють відмові від тютюнопаління, на ринку України представлені іноземними виробниками. Більшість асортименту лікарських препаратів для лікування нікотинової залежності складають імпортовані препарати фармацевтичних компаній McNeil, AB (Швеція), Novartis Consumer Health, S.A. (Швейцарія), Sopharma (Болгарія), Pfizer (США). Проведено аналіз препаратів, що сприяють відмові від тютюнопаління, за лікарськими формами. Лікарські засоби для лікування нікотинової залежності представлені на ринку України у вигляді таких лікарських форм, як гумки жувальні, таблетки, пластри трансдермальні та гранули. За отриманими максимальними показниками розроблений асортиментний контур цільового сегменту фармацевтичного ринку препаратів, що сприяють відмові від тютюнопаління (макроконтур). Макроконтур цільового сегменту ринку може бути використаний для вивчення асортименту окремої аптеки (мікроконтур) з метою можливості поповнення асортиментних портфелів.

АНАЛИЗ АССОРТИМЕНТА ПРЕПАРАТОВ, СПОСОБСТВУЮЩИХ ОТКАЗУ ОТ ТАБАКОКУРЕНИЯ, ПРЕДСТАВЛЕННЫХ НА ФАРМАЦЕВТИЧЕСКОМ РЫНКЕ УКРАИНЫ**М.Н.Кобец, Ю.Н.Кобец**

Ключевые слова: маркетинговые исследования; ассортимент; препараты, способствующие отказу от табакокурения; никотиновая зависимость

С целью обеспечения доступности населения к эффективным, качественным и безопасным лекарственным средствам проведен анализ ассортимента препаратов, способствующих отказу от табакокурения, представленных на фармацевтическом рынке Украины, по АТС-классификации и странам-производителям. При никотиновой зависимости используют 2 вида терапии: никотинозаместительную терапию и терапию с использованием лекарственных средств, не содержащих никотина. В ходе исследования установлено, что в Украине зарегистрировано 11 торговых названий препаратов для лечения никотиновой зависимости, среди которых 8 никотинсодержащих препаратов (1 препарат содержит цитизин, 1 – варениклин и 1 гомеопатический препарат), которые выпускаются 5 странами-производителями. Установлено, что большинство препаратов, которые способствуют отказу от табакокурения, на рынке Украины представлены иностранными производителями. Большинство ассортимента лекарственных препаратов для лечения никотиновой зависимости составляют импортные препараты фармацевтических компаний Mcneil, AB (Швеция), Novartis Consumer Health, S.A. (Швейцария), Sopharma (Болгария), Pfizer (США). Проведен анализ препаратов, которые способствуют отказу от табакокурения, по лекарственным формам. Лекарственные средства для лечения никотиновой зависимости представлены на рынке Украины в виде таких лекарственных форм, как резинки жевательные, таблетки, пластыри трансдермальные и гранулы. По полученным максимальным показателям разработан ассортиментный контур целевого сегмента фармацевтического рынка препаратов, способствующих отказу от табакокурения (макроконтур). Макроконтур целевого сегмента рынка может быть использован для изучения ассортимента отдельной аптеки (микроконтур) с целью возможности пополнения ассортиментных портфелей.