

MINISTRY OF PUBLIC HEALTH OF UKRAINE  
NATIONAL UNIVERSITY OF PHARMACY

**TOPICAL ISSUES  
OF NEW DRUGS DEVELOPMENT**

**Vol. 2**

April 20, 2017  
Kharkiv

Kharkiv  
NUPh  
2017

УДК 615.1

A43

Редакційна колегія: академік НАН України Черних В. П., проф. Котвіцька А. А., доц. Крутських Т. В., Данильченко С. Ю.

Укладачі: Матерієнко А. С., Нетьосова К. Ю., Сурікова І. О., Григорів Г. В., Равшанов Т. Б.

Актуальні питання створення нових лікарських засобів: тези доповідей XXIV міжнародної науково-практичної конференції молодих вчених та студентів (20 квітня 2017 р.). в 2-х т., Т. 2. – Х.: Вид-во НФаУ, 2017. – 413 с.

Збірка містить матеріали науково-практичної конференції молодих вчених та студентів «Актуальні питання створення нових лікарських засобів». Матеріали згруповано за провідними напрямками науково-дослідної та навчальної роботи Національного фармацевтичного університету. Розглянуто теоретичні та практичні аспекти синтезу біологічно-активних сполук і створення на їх основі лікарських субстанцій; стандартизації ліків, фармацевтичного та хіміко-технологічного аналізу; вивчення рослинної сировини та створення фітопрепаратів; сучасної технології ліків та екстемпоральної рецептури; біотехнології у фармації; досягнень сучасної фармацевтичної мікробіології та імунології; доклінічних досліджень нових лікарських засобів; фармацевтичної опіки рецептурних та безрецептурних лікарських препаратів; доказової медицини; сучасної фармакотерапії, соціально-економічних досліджень у фармації, маркетингового менеджменту та фармакоєкономіки на етапах створення, реалізації та використання лікарських засобів; управління якістю у галузі створення, виробництва і обігу лікарських засобів; інформаційних технологій у фармації та медицині; основ педагогіки та психології; суспільствознавства; філології. Для широкого кола наукових і практичних працівників фармації та медицини.

УДК 615.1

© НФаУ, 2017

UDC 615.1

A43

Editorial board: academician of NAS of Ukraine Chernykh V. P., prof. Kotvitska A. A., ass. prof. Krutskiyh T. V., Danylchenko S. Yu.

Compilers: Materiienko A. S., Netyosova K. Y., Surikova I. O., Grygoriv G. V., Ravshanov T. B.

Topical issues of new drugs development: Abstracts of XXIV International Scientific And Practical Conference Of Young Scientists And Student (April 20, 2017) in 2 vol., Vol. 2. – Kh.: Publishing Office NUPh, 2017. – 413 P.

Book of Abstracts includes materials of Scientific and Practical Conference of Young Scientists and Students «Actual questions of development of new drugs». Materials are grouped according to the main directions of scientific, research and educational work of the National University of Pharmacy. Theoretical and practical aspects of the synthesis of biologically active compounds and development of medicinal substances on their basis; standardization of drugs, pharmaceutical and chemical-technological analysis, the study of raw materials and herbal remedies development, modern drug technology and extemporal recipe; biotechnology in pharmacy, modern advances in pharmaceutical microbiology and immunology, clinical trials of new drugs, pharmaceutical care for prescription and OTC-drugs, evidence-based medicine, modern pharmacotherapy, socio-economic studies in pharmacy, marketing management and pharmacoconomics during the development, implementation and use of drugs, quality management in development, production and trafficking of drugs; information technologies in pharmacy and medicine; basics of pedagogy and psychology; social science; philology are presented. For a wide audience of scientists and pharmaceutical and medicinal employees.

UDC 615.1

© NUPh, 2017

# EVALUATION OF THE STATE OF THE PHARMACEUTICAL MARKET OF EXPECTORANT DRUGS

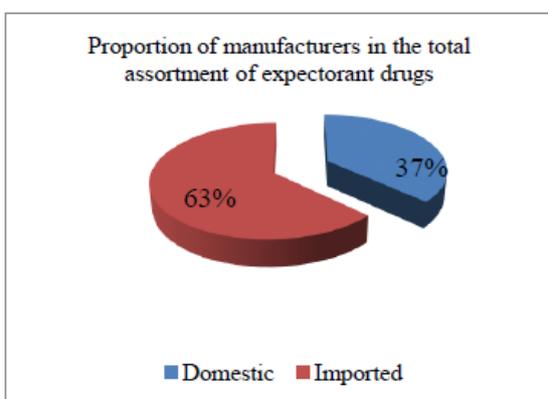
Ismailova F. B.

Scientific supervisor: Yunusova Kh. M., Doctor of sciences  
Tashkent pharmaceutical institute, Tashkent, Uzbekistan  
fz.ismailova555@inbox.ru

**Introduction.** Cough - a symptom that accompanies most respiratory diseases (signaling of respiratory disease). From the physiological point of view, it is a complex reflex protective reaction aimed at removing excess mucus and foreign bodies from the respiratory tract. By its nature, cough is dry (unproductive) and moist (productive). The duration is divided into acute (up to 3 weeks), prolonged (from 3 weeks to 3 months) and chronic (more than 3 months). Considering the fact that cough is just a protective reaction for various diseases, the main goal of therapy is not to eliminate it, but to alleviate its course. Elimination (suppression) is carried out in the case of dry painful cough. In the treatment of wet cough, expectorant and mucolytic agents are used.

**Methodology.** To achieve this goal, the following methods were used: the analysis of the register of medicines, the information retrieval system "Morion" and the database of medicines in Uzbekistan "Drug audit", which allows to analyze the range of active substances that are part of monopreparations and combined expectorants. A comparative retrospective analysis method was also used. Data processing was carried out with the help of the computer program "MS Excel" in 2010.

**Results.** According to the state register of medicinal products of the Republic of Uzbekistan for 2012-2016, 43 international non-proprietary or chemical names of funds possessing expectorant or mucolytic effect are registered, both in monocomponent forms of medicines and in combinations. By composition, the preparations can be of plant origin and obtained synthetically.

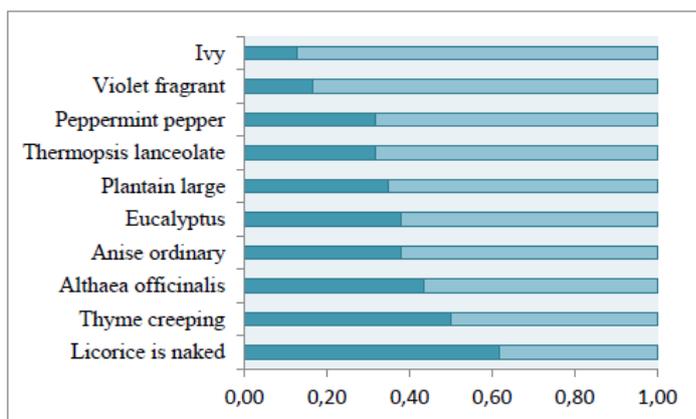


If we talk about producing countries, then a much larger share is occupied by imported medicines. 29 countries offer 80 trade names of drugs. Domestic producers are represented 46 names of drugs.

Among which 37% of domestic and 63% of imported production. Traditionally, a large distribution (preference) in the group of expectorants received preparations of plant origin.

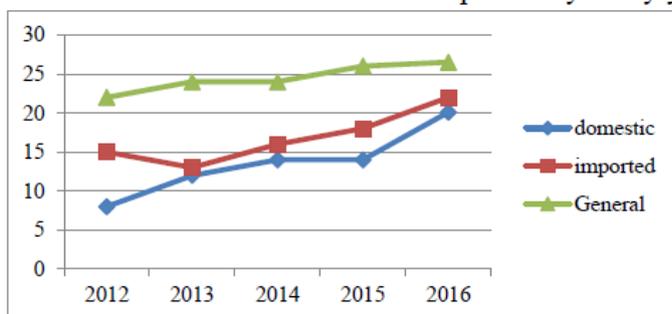
Interest and popularity of phytopreparations are due to the content of biologically active substances, which are more naturally than synthetic drugs, are included in metabolic processes, have good tolerability and significantly fewer side effects. In addition, herbal preparations in addition to expectorant have anti-inflammatory, softening, enveloping effect. Currently, 18 plants are allowed to be used as expectorants in Uzbekistan. The most common drugs are based on licorice naked, thyme creeping, medicinal althea, anise and eucalyptus.

Number of trade names of medicines on the basis of medicinal plants.



According to the state register of medicinal products of the Republic of Uzbekistan for 2012-2016, it has been analyzed dynamics of range of assortments of expectorant drugs. It can be seen on the graph, within this period range of assortments has been increased from 24 to 43

trade name. General assortments expansion year by year periodically.



Let us dwell on such a form of medicines as syrup, which is the most preferable and convenient in children's practice. To date, a large number of expectorants of vegetable origin in the form of syrups are represented on the

market.

**Conclusion.** Apparently, the assortment of syrups is very diverse, and its main part is represented by foreign producers, in particular, Germany, India, Slovenia. However, not all patients can buy these drugs, primarily because of their cost. In these conditions, it is important to expand the range of available medicines. The obtained data indicate that expectorants are presented in a wide range. The prices vary from low to high depending on the manufacturer, which makes it possible to choose, and also makes the treatment accessible to different segments of the population. The number of domestic preparations on the pharmaceutical market in Uzbekistan is gradually increasing, which is important in the economic aspect.