

this model is called “structure-process-outcome”. The Kozma model, place outcomes into three categories - economic, clinical, and humanistic Outcomes (ECHO model) which characterize the value of pharmaceutical services. According to risk model, risks are analyzed by combining severity of consequences and probability in the context of existing situation, in PI are evaluated medication errors. According to the basic model of pharmacoeconomics, the value of a PI considers both inputs and outputs of a PI compared to the absence of a PI. Inputs can be thought of as resources required implementing the PI. Outputs can be thought of as consequences of a PI, in form of clinical, humanistic, or process-related consequences. The difference between the cost of the original therapy and the new therapy gives the cost savings (or the increase in the cost of therapy). Cost avoidance refers to the prevention of additional health resources which are required to treat drug adverse events if a pharmacist has not intervened such as a hospitalization or a medical visit. Cost of implementation of a PI refers to the expenses of providing the PI such as cost of pharmacist’s time, phone calls.

**Conclusions.** Various structures and contents of tools for evaluation of impacts of PIs were highlighted. Majority of tools focused primarily on assessing clinical aspect and failed to detect other impacts.

**Key words:** pharmacist interventions, pharmacoeconomic model.

#### **419. COMPETITIVE REGULATIONS IN THE PHARMACEUTICAL MARKET AND ITS CONSEQUENCES**

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**Introduction.** Competition reflects a relationship of forces between the economic agents in the market of consumer goods and targeted services for the purpose of attracting the consumer, resulting in growth, diversifying and improving the quality of the offer and an increase in consumers' demand for goods consummation, being better informed about the existing consummation alternatives. The pharmaceutical market has some particularities: a) a large number of products with very strict demands on their characteristics, a long period of research and a large volume of resources needed for their conditioning; b) consumers of the pharmaceutical market are the health system and the sick people, usually economically disadvantaged. In order for the effects of competition to be predominantly beneficial, it is necessary to regulate it, thus ensuring a balance between the interests of businesses, drug users, increasing the number of products offered on the market and ensuring the performances that characterize them (harmlessness, effectiveness, quality and accessibility).

**Aim of the study.** Highlighting the regulations on the pharmaceutical market of the Republic of Moldova and their consequences on competition.

**Materials and methods.** The study is based on an analysis of the legal norms for regulating some activities related to the pharmaceutical activity and substantiating these rules in terms of the effects on competition as an element of the market.

**Results.** The pharmaceutical legislation of the Republic of Moldova contains several regulations that influence the level of competition in the pharmaceutical market. 1. Expansion and placement regulations of pharmacies. These regulations contradict the requirements of the market economy, examined from the point of view of the drug trade, but they were introduced

to ensure the interests of the consumer, to discourage excessive drug use and encourage their rational use, for economic agents to ensure minimum operating conditions and stimulate competition on the basis of ethical principles of drug assistance. 2. Data protection and protection of the introduction of pharmaceutical products. Data exclusivity is a form of intellectual property protection and allows pharmaceutical companies to use only their own clinical trial data for a predetermined period, as a measure of return on initial investments which led to the discovery of an innovative pharmaceutical preparation and the stimulation of new investments in this field. However, this measure conflicts with the declared priority of the authorities of the Republic of Moldova regarding the increase of prices for pharmaceutical preparations and the reduction of the financial burden related to the costs of medicines for citizens. Therefore, this regulation will contribute to the elimination of economic agents, producers of generic drugs, from the pharmaceutical market.

**Conclusions.** Competitive legislative regulations of the pharmaceutical market do not always reflect the provisions of the state policy in the field of medicine.

**Key words:** pharmaceutical market, competition, pharmacy placement, drug authorization, regulations.

## DEPARTMENT OF PHARMACOGNOSY AND PHARMACEUTICAL BOTANY

### 420. *ACTINIDIA KOLOMIKTA* (RUPR. ET MAXIM.) PLANT – SPECIES WITH ORNAMENTAL, ALIMENTARY AND PHARMACEUTICAL VALUE

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**Introduction.** The genus *Actinidia* includes about 40-60 species. During the last 2 decades, the scientific community has realized a lot of scientific researches on chemical composition of different organs, especially on species *A. kolomitka*.

**Materials and methods.** The profile literature and databases on species *A. kolomitca* were evaluated and analyzed.

**Results.** Species *A. kolomitka* is a very long-lived, deciduous woody scrambling vine and creeper, which ultimately grows to 8–10 m, commonly known as variegated-leaf hardy kiwi which was mentioned as native to temperate mixed forests of the Russian Far East, Korea, Japan and China (Eastern Asiatic Region). At the beginning of XX century, this species was cultivated in England and North America as ornamental plant. Later, at the middle of century, the species began to be known as edible fruit producer, and at the end of it became the object of intense scientific researches. Scientific investigations were carried out under different aspects in different scientific centers: creation of cultivars and varieties resistant to environmental factors, cultivation technologies, chemical composition, nutritional and therapeutic value. A lot of cultivars were bred and cultivated in: Poland, Finland, Russia, Lithuania and Leetonia. This species was introduced in the collection of exotic plants of *Alexandru Ciubotaru* National Botanical Garden (Institute) in 1998 year. The world scientific researchers shown the useful chemical compounds in different organs of plant: ascorbic acid and other organic acids, pectins, tannins, sugars, vitamins P, Q, carotene in fruits; alkaloids – roots; lactones, flavonoids, saponins – leaves; and flavonoids such catechins – cork.