

Materials and methods: Experiments were performed on 30 Wistar rats. During the research was used the combination of two antimicrobial agents: ampicillin and metronidazole, 2% glutaraldehyde solution in a phosphate buffer (PBS), 1% - ethanol solution of OsO₄, mixture of epone and araldite, toluidine blue. In addition the microtome LKB-III, MBI-6 microscope. Statistical analysis was performed using Student t-test.

Results: We have investigated some structural parameters of the small and large intestine, and activity of two intestinal peptide hydrolyses in rats after ampicillin and metronidazole administration during 3 and 5 days. After 3 days of antibiotic administration, the decrease in the weight of mucosa in the small intestine was accompanied with a reduction in the villous height and width in this part of the intestine, and in the weight of mucosa in the colon. At the same time the number of goblet cells in the small intestinal epithelium was increased. Specific activities of aminopeptidase M and glycyl-L-leucine dipeptidase (mmol/min per g) in the mucosa of the small intestine were increased. The total activities (mmol/min calculated per a part of the intestine) of the same enzymes did not change. The administration of antibiotics during 5 days resulted in an increase of specific activity of aminopeptidase M in the mucosa of the proximal part of the small intestine. In the chyme of the small intestine and colon, activities of the same enzymes (mmol/min calculated per a part of the intestine) were increased on the third and fifth days of the antibiotic administration.

Conclusions: Thus, the application of ampicillin and metronidazole within 3—5 days causes a disturbance of the structural and functional parameters in the small and large intestines which is best seen on the third day of the drug administration.

Keywords: Antibiotics, dysbiosis, microbiota, structural analysis, intestinal digestive enzymes, small intestine, large intestine

5. EVALUATION OF PHYTO PRODUCTS OBTAINED FROM ARTICHOKE *CYNARA SCOLYMUS L.* ON PHARMACEUTICAL MARKET

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Introduction: Artichoke was used as a food and medicine by the ancient Egyptians, Greeks, and Romans. Nowadays artichoke is widely cultivated in Mediterranean countries. Worldwide ethnomedical uses of artichoke are for bile insufficiency, gallbladder disorders, high cholesterol, liver disorders, hyperglycaemia, detoxification, dyspepsia, jaundice, nausea. Due to clinical proofs of its therapeutic benefits artichoke was introduced in cultivation in the Collection of Medicinal Plants of the Centre for the Cultivation of Medicinal plants of the State Medical and Pharmaceutical University "Nicolae Testemițanu".

Purpose and objectives: This study aimed to analyze the share of phyto products obtained from artichoke's raw materials in European countries and to estimate the main pharmaceutical forms of drugs.

Materials and methods: assessment literature review of the range of drugs, concept-comparative, structure-systemic review, statistics.

Results: The survey is base on published data of marketing authorization in European countries of medicines containing artichoke. The presence of this medicines are for more than 30 years on the European market and were develop accounting for 11 European countries: Austria, Belgium, Bulgaria, Germany, France, Hungary, Poland, Slovakia Spain, Romania, United Kingdom and also in Republic of Moldova. Sate moldovan nomenclator database of Agency of Medicine includes 3 registered herbal medicinal products containing *Cynarae folium* as a single drug and 1 combined product. Although solid dosage forms (tablet and hard capsules) are considered biopharmaceutical most difficult forms constitutes 80% of registered products. The registered liquid pharmaceutical forms are solution for oral intake, fluid extract and tincture, their range submit considerably compared with solid forms. For example the tincture (1:5) is registered only in one country, in Poland.

Conclusions: As a result of the survey was determined that in different countries are used various

pharmaceutical forms based on artichoke extract. However the most common were found to be the solid pharmaceutical forms tablets and hard capsules. Also as a surprise the main solvent for extraction was developed to be the water which came in contrary with the fact that biologically active compounds of phenolic structures, contained in artichoke, are more soluble in highly polar organic solvents. For maintain the production constant improvement of extraction technology is required.

Keywords: Artichoke, extract, pharmaceutical form, tablet

6. INFLUENCE OF MEDIA COVERAGE ON RATIONAL DRUGS USE

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Introduction: According to the concept of rational use of drugs, the patient should follow the drug treatment according to clinical indications, in doses that correspond to individual characteristics over a period of time and cost efficiency. Advertisements of medicines made by physicians, pharmacists, news and television have a major effect on the rational use of drugs.

Materials and methods: A descriptive analysis of coverage media on the rational medicines use in different countries has been carried out.

Results: Many advertised drugs cause complications for patients. This process involves target groups such as doctors, pharmacists and patients, the last are the ones who suffer the consequences imposed by the misuse or unjustified use of drugs. Prescription drugs that claim to have therapeutic effects that haven't been proven in clinical trials, dispensing of drugs without prescription, excess of drug advertising both on TV, magazines, and newspapers and in brochures at the pharmacies and on the streets - are the main problems of the Republic of Moldova. In many studies, information about the effects of a drug overdose promoted in Mass Media was found, where self-poisoning with paracetamol increased by 17% in the broadcast week and 9% in the second week. Interviewers admitted that they were influenced by the episode to take an overdose. Using paracetamol for overdose doubled among viewers (Casualty) after the episode, which shows a negative effect of drug advertising on the population. Another study also made in the UK suggests that the media convey a negative impression that „demonizes" users. Another research by the UK Drug Policy Commission (UKDPC) has shown that nearly two thirds (64%) of UK adults agreed with the statement that "People with a history of drug addiction are too often influenced by the media". Advertising drugs for weight loss or the first symptoms of colds during cold season of the year lead to the inefficient use of drugs, overdose or self-medication but are nonetheless good marketing strategies that bring considerable revenue to the pharmaceutical companies. Based on the study results, we can assert that pathways of media influence are: media→ knowledge→ behavior (learning by focal individuals); media→ beliefs→ behavior (persuading focal individuals); media→ skills→ behavior (instructing focal individuals); media→ awareness→ behavior (triggering focal individuals); media→ info-seeking→ behavior (stimulating focal individuals); media→ knowledge→ influence (learning by influencers); media→ problem salience→ policy (activating policy-makers). Also we could talk about positive effect of the media. With more new and expensive drugs, decisions on public funding will become increasingly difficult. The media will have an important role in enhancing public understanding of the issues around resource allocation. Specialist journalists, guidelines and checklists may help reporting.

Conclusion: Information is spreading rapidly and it's becoming a serious problem in the Republic of Moldova. This raises questions on whether the media is an appropriate way to disseminate such information. Research and thorough analysis will determine the permissible limits of drug advertising in order to prevent harm such as irrational drug use but to inform pharmacists, doctors and patients about the appearance of new effective and safe drugs.

Keywords: Media coverage, rational drugs use