consist of information, ideas, advice and is intended to increase the value of the pharmaceutical product, so chemists promote professional pharmacy service and not just release drugs. Competition for patients is fierce and pharmacy service make the difference between a pharmacy and another because drugs in pharmacies are essentially the same, but the services do not. Pharmaceutical marketing strategic planning provides support for the assessment of the types of goods and pharmacy service ofers by community pharmacy.

Purpose and objectives: The efficiency of developing a strategic plan for marketing pharmacy patient- centered and development pharmacy service-oriented, and implementing this in pharmacy practice.

Materials and methodes: Foundation of the marketing plan for a pacient care, SWOT analyse, elaboration a service project.

Results: Close collaborative relationship between pharmacist and patient is the key to creating and sustaining demand for pharmacy product and service on a long-term basis in community pharmacies. Ability to expand a strategic marketing plan is an important component for pharmacists who want to promote their services. Considered ethical marketing practices can enhance the image of a pharmaceutical enterprise, strengthen consumer confidence, increase satisfaction and determine consumers to benefit further from the services provided by community pharmacy. By means of pharmaceutical services projects determine the skills and responsibilities of pharmacists as health professionals. Refocusing of pharmacy practice gives premises for implimentation of the concept of relationship pharmacy marketing, it refers to attracting, maintaining and enhancing patient relationships to create mutual benefit for the pharmacist and patient. Relationship marketing fits well with promotion pharmacy service, focuses on the pharmacist-patient, rather than releasing drugs, because patients cannot physically see or touch services, they must understand and experience them to derive benefits and appreciate their value.

Conclusion: Were proposed steps for pharmaceutical marketing strategic planning, which would help pharmacists to influence decision making process in pharmaceutical activity and determined the utility service projects in the delivery of pharmacy service.

Keywords: marketing activity, pharmacy service, productive relationships, customers, benefits

22. LYCOPENE – SOURCES AND BENEFITS

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Introduction: Lycopene is a bright red carotenoid pigment. Chemically, lycopene is a carotene, but it has no vitamin A activity. It's also known as rhodopurpurin (common name) and the scientific name is non-provitamin A carotenoid.

Materials and methods: Advanced bibliographic study.

Results: Carotenoids such as lycopene are important pigments found in pigment-protein complexes from plants, photosynthetic bacteria, fungi and algae. It is responsible for bright colors of the fruits and vegetables, has different functions in photosynthesis and protects photosynthetic organisms from damage due to excessive light. The fruits and vegetables with a high concentration of lycopene are: *sun dried tomatoes* (45902µg per 100 grams), *tomato purée* (21754µg per 100 grams); *guava* (5204µg per 100 grams); *watermelon* (4532µg per 100 grams) ; *tomatoes (cooked)* (3041µg per 100 grams) ; *papaya* (1828µg per 100 grams); *grapefruit* (1135µg per 100 grams); *sweet red peppers (cooked)* (484µg per 100 grams) ; *dried herbs & spices (basil)* (393µg per 100 grams) ; *liver (chicken, cooked)* (25µg per 100 grams). Although gac (Momordica cochinchinensis Spreng) has the highest content of lycopene of any known fruit or vegetable, up to 70 times more than tomatoes for example,due to gac's rarity outside its native region of southeast Asia, tomatoes and tomato-based sauces, juices, and ketchup account for more than 85% of the dietary intake of

lycopene for most people. Nowadays, the lycopene is included in a number of food supplements, such as: *Licopen (*Medicer Bio – lycopene 25 mg, flax flour 200 mg)*; Lycopene* – 10 mg(Puritan's Pride)*; Lycopene* -10 mg (Biovea).

Due to its antioxidant properties, lycopene is thought to play a role in preventing cancer and heart disease, lowers LDL levels, enhances the immunity, protects the enzymes. One of the most important benefits of the lycopene is the prevention and treatment of cancer – lung cancer, stomach cancer, bladder cancer, skin cancer and particularly prostate cancer.

Conclusions: The beneficial effects of lycopene determine us to initiate research to assess the lycopene content in different plant sources available on the market as well as some food and dietary supplements.

Keywords: lycopene, antioxidant, cancer

23. NMR SPECTRA INTERPRETATION

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Introduction: From all the methods, nuclear magnetic resonance (NMR) is one that offers the richest and the most complete structural information about organic compounds. This method can be applied to the elucidation of chemical structure as well as the determination of stereochemistry and conformation of their pure substance and mixture. The interpretation of the NMR spectrum becomes an increasingly empowered ability applied in the context of the rapid development of organic synthesis of new compounds, and in the increasing interest for the existing drug substances.

Purpose and Objectives: The highlighting of the main stages of NMR interpretation spectrum, the structure elucidation of organic compounds and determination of their stereochemistry and conformation.

Materials and methods: The study is performed by meta-analysis of published scientific data, standardization of analytical quality documents, articles from magazines and periodicals.

Results: As a result of the study was formulated an algorithm of the interpretation of NMR spectrum. We applied the rules established in the analysis of NMR spectrum, which gave us information about the structure of substances and their conformation. The data that were obtained correlate with the data from the scientific literature and confirm the applicability of the formulated algorithm.

Conclusion: The right interpretation of the NMR spectrum, allows the accurate identification of the structure of an unknown substance, with any molecular weight and any number of molecules, as well as isomers differentiation between them.

Keywords: NMR spectrum interpretation, functional group

24. STUDY OF PHYSICOCHEMICAL PROPERTIES OF A THIODIAZOL DERIVATES WITH ANTI-MYCOBACTERIAL ACIVITIES

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Introduction: Tuberculosis remains one of the most devastating infectious diseases affecting people in different social and age groups. The situation becomes even more complicated with the increasing number of drug-resistant tuberculosis cases, where conventional therapy is no longer effective, and better antimycobacterial drugs either do not exist or are too expensive.

The purpose of the study: Study of physicochemical properties of an anti-mycobacterial compound from the group of thiodiazol derivates.