# MINISTRY OF HEALTH OF UKRAINE ZAPORIZHZHIA STATE MEDICAL AND PHARMACEUTICAL UNIVERSITY DEPARTMENT OF PHARMACY MANAGEMENT AND ECONOMICS

#### PHARMACY MANAGEMENT AND MARKETING

#### SECTION 2 "MARKETING IN PHARMACY"

#### STUDY GUIDE

For students of pharmaceutical faculties of the specialty
226 "Pharmacy, industrial pharmacy"
Professional qualification "Pharmacist"

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The study guide presents educational materials for Section 2 "Marketing in Pharmacy" in the discipline "Pharmaceutical Management and Marketing" (questions for discussion, self-check questions, overview, practical assignments, guidelines for studying the topics of the discipline, self-check tests and a list of references).

For training of Masters of Pharmacy in the field 22 "Health care", specialty 226 "Pharmacy, industrial pharmacy", professional qualification "Pharmacist"

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#### Content

PREFACE	4
TOPIC 1. BASIC PROVISIONS OF MARKETING IN PHARMACY.	5
THE NOTION OF PHARMACEUTICAL MARKETING	
MANAGEMENT	
TOPIC 2. THE MARKET AS AN OBJECT OF MARKETING.	27
PHARMACEUTICAL MARKET, ITS FEATURES. STUDY OF THE	
PHARMACEUTICAL DRUG MARKET	
TOPIC 3. MARKET DEMAND AND SUPPLY. FEATURES OF THE	
FORMATION OF DEMAND FOR MEDICINAL PRODUCTS	44
TOPIC 4. INFORMATION MARKETING SYSTEMS. MARKETING	
RESEARCHES	61
TOPIC 5. PRODUCT IN THE MARKETING SYSTEM. PRODUCT	
POLICY OF PHARMACEUTICAL ENTERPRISES	83
TOPIC 6. PRICE, PRICING, PRICING POLICY OF	
PHARMACEUTICAL ENTERPRISES	106
TOPIC 7. SALES ACTIVITY OF PHARMACEUTICAL	
ENTERPRISES	125
TOPIC 8. SYSTEM OF MARKETING COMMUNICATIONS.	142
PROMOTION OF MEDICINES ON THE MARKET	
TOPIC 9. INTERNATIONAL PHARMACEUTICAL MARKETING	153
RECOMMENDED LITERATURE	170

#### **PREFACE**

The pharmaceutical market is characterized by a high level of competition, so it is practically impossible to stay on it without marketing knowledge.

Marketing as a philosophy of the pharmaceutical enterprise contributes to a successful response to changes in the external environment, to the requirements and requests of consumers, ensures the adoption of management decisions based on marketing research and analysis of the organization's capabilities. Knowledge and use of marketing ensures the enterprise's success in competition, penetration of new markets, conquest of consumers and ultimately - achievement of goals aimed at making a profit.

This study guide is designed for students to study the basic principles of the theory and practice of pharmaceutical marketing in accordance with the program of the academic discipline "Pharmacy Management and Marketing".

10 hours of lectures and 30 hours of practical classes are allocated for classroom work.

This study guide contains methodological instructions for studying the topics of the discipline, discussion questions, questions for self-control, tasks for practical work, a list of recommended literature, a brief informational material and examples of situational test tasks for self-control.

Preparation for practical classes is carried out by students on the basis of educational, educational and methodological materials of the discipline and lecture materials listed in the list of recommended literature.

#### TOPIC 1

## BASIC PROVISIONS OF MARKETING IN PHARMACY. THE NOTION OF PHARMACEUTICAL MARKETING MANAGEMENT

**Students should know:** the basics of marketing, the evolution of marketing concepts, the essence and principles of marketing management at a pharmaceutical enterprise.

**Basic terms and concepts**: marketing, goals, principles and functions of marketing, need, demand, supply, product, market, types of marketing, pharmaceutical marketing, marketing concepts, pharmaceutical marketing management

#### **QUESTIONS**

- 1. Concept of marketing. The main goals, principles and functions of marketing.
- 2. Subjects of marketing and main categories of marketing.
- 3. Complex marketing (mix-marketing).
- 4. Types of modern marketing. Pharmaceutical marketing.
- 5. Aspects and evolution of the marketing concept.
- 6. Marketing management process. Marketing planning.
- 7. Organizational structure of marketing services.
- 8. Principles of marketing control.

#### **SELF-CHECK QUESTIONS**

- 1. The concept of marketing, its goals and principles.
- 2. Target orientation and complexity of marketing.
- 3. Main functions (analytical, production, sales and management and control functions) and sub-functions of marketing.
- 4. Subjects of marketing and the main categories of marketing: need, need, demand, offer, product, exchange, agreement, market. The importance of these elements of the market economy in the theory of marketing.
- 5. Complex marketing (mix-marketing).
- 6. Main types of marketing (depending on the field, object of application and types of demand).
- 7. Definition of pharmaceutical marketing.
- 8. Aspects of the marketing concept (philosophical, analytical, active).
- 9. Types of basic marketing concepts (concept of production improvement, product concept, concept of commercial efforts, concept of integrated marketing, concept of socio-ethical marketing and concept of holistic (holistic) marketing).
- 10. Marketing management.
- 11. Marketing planning.
- 12. Organizational structure of marketing services.

#### 13. Principles of marketing control.

#### **OVERVIEW**

Markets may be viewed as gaps that separate parties interested in an exchange. Consequently, the process of the market actualization requires that various activities (called marketing activities) remove the gaps between parties interested in an exchange. Some of these points require careful examination.

Understanding of demand and supply through the eyes of the customer is a process called marketing.

The term "marketing" means market, and in a broader modern sense - it is market activity. Marketing as an economic category has a very capacious content.

Marketing is the social process by which demand for goods and services is predicted, expanded, and satisfied through their development, promotion, and sale

Modern definitions of marketing contain a wide range of functions, for example.

Marketing is the process of choosing an assortment, pricing policy, distribution channels, and product promotion in order to satisfy customer needs and make a profit.

**Marketing** is a process that starts with identifying and understanding the needs and wants of the customer (demand) and then fulfilling those needs and wants (supply). An effective marketing plan offers a solution to fulfill the needs and wants of society (individuals and organizations), while achieving the goals of the organization.

In addition, marketing can create new needs or reformat existing needs. Both customers (demand) and organizations (supply) have objectives.

Customers' goals are to satisfy their needs and wants.

Organizations' goals are to supply a good or service that provides value or is useful to customers and to provide employment for employees and profit to shareholders.

In the case of nonprofit organizations, marketing success may be measured by the public's response rather than by profitability.

**Pharmaceutical Marketing** is the process (managerial activity) through which the provision of pharmaceutical care and the achievement of the goals of the pharmaceutical enterprise is ensured through maximum satisfaction of the needs of consumers in medicines and cosmetics, medical devices, and other products authorized for sale through pharmacies.

Pharmaceutical marketing is a branch of marketing science and practice focused on the communication, differential positioning and commercialization of pharmaceutical products, like specialist drugs, biotech drugs and over-the-counter drugs. By extension, this definition is sometimes also used for marketing practices applied to nutraceuticals and medical devices

Whilst rule of law regulating pharmaceutical industry marketing activities is widely variable across the world, pharmaceutical marketing is usually strongly regulated by international and national agencies, like the Food and Drug Administration and the European Medicines Agency. Local regulations from government or local pharmaceutical industry associations like Pharmaceutical Research and Manufacturers of America or European Federation of Pharmaceutical Industries and Associations (EFPIA) can further limit or specify allowed commercial practices.

Pharmaceutical marketing, as a subspecialty of marketing, can be defined as a process, by which market for pharmaceutical care is actualized. It encompasses all the activities carried out by various individuals or organizations to actualize markets for pharmaceutical care. Let us examine this definition closely. Marketing plays a key role influencing or directing activities from the manufacturer to the patient. It should be noted that the patient stands at the peak of the marketing pyramid. It is his characteristics that determine which goods will be sold or, more correctly, which goods will be produced.

From a social value perspective, four alternative marketing goals can be formulated:

- maximizing consumption,
- maximizing customer satisfaction,
- maximizing consumer choice,
- maximizing quality of life.

Maximizing consumption maximizes production, employment, and therefore the welfare of society.

The goal of maximizing customer satisfaction assumes that what is more important is not simply increasing consumption, but achieving increased customer satisfaction.

In order to maximize consumer choice, it is necessary to provide such a variety of products that consumers can find products that exactly suit their tastes.

Maximizing quality of life is one of the alternative social goals of marketing, according to which marketing should not only ensure the quantity, quality, variety and availability of goods at reasonable prices, but also the quality of the cultural and physical environment of people.

The marketing system provides decision of such problems:

- complex studying of the market;
- marketing strategy development and orientation of all divisions on satisfaction of consumers wants;

- revealing of potential demand and unsatisfied needs;
- planning of commodity assortment and prices;
- working out of measures on the fullest satisfaction of existing demand;
- forecasting of needs for the enterprise goods;
- distribution planning and realization;
- planning and organization of promotion activity for products on the market (advertising, sale stimulation, etc.);
- working out of actions for improvement of management and the manufacture organization;
- an estimation of competitiveness of the enterprise.

Marketing principles. The manufacturers should take into account some principles:

- to study a condition and changes of a consumer's demand;
- to search for a market niche, to carry out segmentation of the market and to let out production in view of features of separate segments;
- to improve the goods constantly and to improve its quality;
- it is necessary to influence the market using the system of promotion: selling, advertising, service;
- to improve the marketing constantly.

In other words, the basic principles of marketing:

- Focus on a clear commercial result
- An integrated approach to achieving your goals based on needs analysis,
   market forecasting, product research, advertising, sales promotion
- Maximum consideration of the conditions and requirements of the selected market with simultaneous targeted impact on it
- Long-term goals aimed at products that have fundamentally new consumer properties and ensure long-term commercial success
- Adaptive entrepreneurship, ensuring a quick and effective response to changes in the external environment and the manifestation of initiative as a form of management of production and sales of products

Functions of marketing. Functions of marketing are divided into four groups:

- Analytical (research) function;
- Production function;
- Sale market function;
- Control and monitoring function.

The research function includes the research of market, consumer, product, and forming a structure.

The production function includes organizing the production of new products, working out new technologies, and management of quality and products competitiveness.

The sale market function includes organizing the distribution, service, promotion, carrying out a purposeful commodity and the price policy.

The management and control function includes strategic planning, control of marketing, promotion system, marketing management.

Subjects of the pharmaceutical market are manufacturers of pharmaceutical products, wholesale intermediaries, retail intermediaries, organizations – consumers (treatment-and-prophylactic institutions), end users, and experts in marketing

The complex of marketing and its features in pharmacy.

The process of coordinating consumer demands and organization capabilities takes place in a certain external environment in which marketing activities are carried out.

The external marketing environment describes the factors, conditions, forces and entities external to marketing that affect an organization's ability to establish and maintain successful relationships with consumers. These factors and forces are not subject to direct control by the organization.

The marketing environment is a set of factors, forces and conditions operating outside the company and influencing on its marketing activity.

Allocate micro-and macro environment.

The microenvironment is presented by the subjects, making direct impact on activity of the enterprise (firm). Them concern: consumers, marketing intermediaries (promote advancement, sale and distribution of goods), competitors and contact audiences. The last sometimes name media environment.

Factors of microenvironment concern demographic, economic, natural and geographical, scientific and technical, political and cultural.

Marketing research of an environment are pledge of successful marketing, achievement of balance between enterprise's interests and other market subjects, process of adaptation to changing conditions.

If the external environment is not under the direct control of the organization, then marketing activities are managed by influencing the parameters of the marketing mix.

Proceeding from definition, in marketing three interconnected spheres are allocated:

- the first decision-making for choice the consumer, manufacture or realization of the certain product and the market;
- the second «three whales» marketing: sale, advertising, service;

- the third – internal marketing management in firm (planning, financing, the organization of corresponding goods manufacture).

Any firm that wishes adequately to serve its market would, therefore, strive to direct marketing activities so the right product is sold in the right quantity, at the right place, at the right price, at the right time. As the products, with which we are dealing in this industry, affect patients' health, some of these factors assume even greater importance than that attached to the stimulation of sales.

The marketing mix principles (also known as the 4P's) are used by business as tools to assist them in pursuing their objectives. The marketing mix principles are controllable variables, which have to be carefully man-aged and must meet the needs of the defined target group. The interaction of these components makes up the marketing mix and results in utilities for the consumer.

The marketing mix is a set of controllable parameters of marketing activities, manipulating which the organization's management tries to best meet the needs of market segments.

Product - anything that is offered for sale or exchange.

Product is a key element of marketing mix, which basic characteristics are size, color, packing, design. Getting the product, the consumer gets those blessings or utility with which the product can provide to it. Important for the consumer is also (in more degrees, than characteristics) sup-port or service. Service elements, in particular, for medical products and products of medical appointment, are:

- pharmaceutical service;
- presence of the instruction on medical application;
- pharmaceutical care, recommendations and consultations during purchase;
- maintenance of complex purchases, selling of accompanying preparations or other goods;
- qualification of pharmaceutical personnel;
- speed of orders performance;
- consideration of clients complaints.

The second element of marketing mix is the price.

Price - the payment we ask: our expenses, fees or salaries, etc., which the consumer pays.

By a certain pricing policy, the enterprise actively influences both a sales volume in the market, and size of received profit.

Place is how, when and where we deliver our product and service depending on consumer

The primary goal of a distribution policy (place) is the choice of the optimum scheme of product's delivery from the manufacturer to the con-summer (direct sale, through system of wholesale and-or retail trade, through trading agents, etc.), the

organization of transportation, storage, processing of cargoes, and also after sale service.

Promotion is what we use to communicate with the consumer, advertising, sales promotion, exhibitions, pharmacy image.

Product promotion on the market provides an establishment of effective contacts with already available or potential buyers. A main objective of such contacts is creation of favorable impression (image) on consumer about the company and its production. A considerable part of promotion tools of the goods make: advertising, the organization of exhibitions, fairs, granting of trading discounts, performances in mass media, etc.

Last years the list of marketing mix elements is added by the such as people.

People are personnel working in the pharmacy, sales managers, support staff.

Elements of the pharmaceutical marketing complex "5S":

- 1) Feature socio-ecological (Specificity of social and ecological);
- 2) *Health Feature* (Specificity of health);
- 3) *Licensing feature* (Specificity of licensing);
- 4) *Features of communication methods* (Specificity of communications methods);
- 5) Socio-ethical feature (specificity of social and ethical).

Failure to follow the rules for taking medications can lead to poor health and even death. In addition, most drugs are biologically active substances, which complicates the process of their disposal.

*Health*. The purchase of medicine depends on the disease, the degree of its complications, and nosology.

*Licensing*. Production, wholesale and retail sale of medicines is carried out only on the basis of a license

*Feature of communication methods*. Medicine is a product of forced demand. This should be taken into account when advertising, promoting and selling it. A prescription drug is prescribed by a doctor, and an over-the-counter drug is recommended by a pharmacist.

In practical classes we will use the following categories of marketing:

- Need a specific form of need satisfaction corresponding to the cultural level and personality;
- Demand need backed by purchasing power;
- Exchange the act of receiving a desired object from someone in exchange for something;
- Deal commercial exchange of values between entities. It can be classical (monetary) and barter (exchange of goods or services in kind);

Market - a set of existing or potential sellers and buyers of some products;
 this is the place where transactions are made

#### Types of modern marketing (including pharmaceutical)

They distinguish the marketing focused on the consumer, the marketing focused on the goods, the marketing focused on the demand (remarketing, demarketing).

The following types of marketing are distinguished depending on the type of activity:

- marketing of services;
- marketing of organizations;
- marketing of individuals;
- marketing of ideas;
- marketing of places.

Marketing of services is characterize that its object (services) has a number of features: nonmaterial, inability to storage, inherence of service from the supplier or the surrounding conditions, difficultly standardized result.

Marketing of the organizations is directed on creation, support or change of the relation and behavior of all persons and organizations in which the given enterprise is interested.

Marketing of ideas of public character is a working out, realization and the control over performance of the programs promoting comprehension or perception by target group of the population of certain public idea, movement or practice.

Marketing of places is an activity on creation, support or change of the relation of consumers (clients) to separate places, location of clients.

The following types of marketing are depending on market coverage:

- mass marketing;
- product differentiated marketing;
- targeted marketing;

Depending on the period on which the marketing policy of the enterprise is planned and developed, allocate strategic, tactical and operative marketing.

In enterprise work some kinds of marketing depending on demand are applied: demarketing, conversion marketing, the creative marketing sup-porting, counteracting, marketing stimulating, remarketing, synchromarketing.

Demarketing is the kind of marketing directed on reduction of demand for goods or services which cannot be satisfied because of insufficient level of capacities, limitations of commodity resources and raw materials. Basically demarketing is used for the prestigious, most popular goods or in development of the manufacture, especially new goods, models. To demand reduction such means

can be applied, as increase of the price on goods, refusal of advertising and sale stimulation.

Conversion (developing) marketing is marketing at negative demand, at such situation in the market when all or majority of segments refuse from given goods. The purpose of this kind is change of negative relation of consumers to the goods on positive.

Creative marketing is used in the latent demand conditions, the problem is transformation of a potential demand in real.

Supporting marketing is directed on support of an existing demand level.

Counteracting marketing is realized for the purpose of maintenance of wellbeing of the consumer or a society as a whole, when demand for separate goods can be considered as the irrational. Such goods, for example, concern, alcohol drinks, tobacco products, "piracy" production, etc.

Stimulating marketing is the marketing kind, which purpose is stimulation of demand with condition of the indifferent relation of the consumer to goods.

Remarketing is necessary in situation of demand reduction, characterize for all kinds of goods and any period of time depending on a phase of product life cycle. Its purpose is maintenance of market novelty for goods or reorientation of the enterprise on the new markets.

Synchromarketing is focused on conditions, when demand considerably exceeds productive capacities or, on the contrary, volumes of manufacture of given goods more than market needs, problem is search of smoothing ways for fluctuations of demand.

Depending on a territorial principle distinguish such kinds of marketing: internal (within one country), international marketing (sometimes name external economic, foreign trade. Differs global problems caused by work of the enterprise in the foreign markets).

#### Marketing concept and its evolution

So now you've gotten the bird's-eye view of marketing as a practice, and you now know what marketing is. However, let's take a trip back through time to look at the evolution of marketing practices and how many of today's marketing strategies came to be.

#### Concept means:

- a certain way of understanding, interpreting any phenomena, the main point of view, the guiding idea for their coverage;
- a system of views and ways to achieve goals, a general understanding of phenomena;
- any marketing concept includes three aspects;

- philosophical (ideological) system of thought and ideological basis or entrepreneurial activities;
- analytical understanding and market research (strategic marketing);
- active solves a number of issues regarding penetration to the market (tactical marketing).

The marketing concept has arisen in the USA in the end of XIX beginning of XX centuries.

The first definition of marketing belongs to Americans R. Butler and A. Shou, they have defined marketing as a combination of factors which should be considered at the selling process.

Marketing as the management concept has developed in 60-70 years XX the item though its first displays were observed in the late twenties and di-rectly after the Second World War.

During evolution of the theory and marketing practice during the different historical periods certain groups of its concepts prevailed. In group of concepts-representatives of passive, incidental marketing existed: production concept, product concept, sales concept, marketing concept and socio-ethical marketing concept, holistic marketing concept.

#### The Production Concept

The production concept assumed that consumers were mostly interested in product availability and price, not necessarily product features. As a result, companies concentrated on high production, low costs, and mass distribution. In other words, to use the oft-used line from the movie Field of Dreams, "If you build it, they will come." People were so hungry for mass-produced goods that companies didn't have to do a lot of sales or marketing.

#### The Product Concept

With product availability a thing of the past, consumers began to favor products that offered quality, performance, and/or innovative features. As a result, companies concentrated on making superior products and improving them over time. One of the problems with this type of thinking is that marketers may fall in love with a product (known as "marketing myopia") and may not realize what the market truly wants or needs.

#### The Sales Concept

Competition had increased over the years, and there was little unfulfilled demand in the marketplace. Marketing evolved from simply producing products that customers wanted to trying to persuade customers to buy through advertising and personal selling. The basic premise of the sales concept was that consumers and businesses need to be "coaxed" into buying, and the aim of companies was to sell what they made rather than make what consumers wanted.

#### The Marketing Concept

The marketing concept was built on the premise that an organization will achieve its goals when it satisfies the needs and wants of the consumer. As a result, firms began to focus on customer needs before developing products, rather than developing products and then trying to "sell" them to consumers. The marketing concept was also the start of relationship marketing— fostering long-term relationships with customers in order to ensure repeat sales and achieve stable relationships and reduced costs.

#### The Societal and ethical Marketing Concept

The societal marketing concept is simple. Companies make good marketing decisions by considering not only consumers' wants and needs but additionally the balance between those wants and needs and the company's capabilities and society's long-term interests. The concept emphasizes the social responsibilities that companies bear. This means meeting consumers' and businesses' current needs while simultaneously being aware of the environmental impact of marketing decisions on future generations' ability to meet their needs.

**Holistic marketing** is a marketing strategy that focuses on the whole business as one entity. In a holistic marketing strategy, all the company's departments and all the different components of the marketing strategy work together to accomplish shared goals and support the company's purpose.

Holistic marketing is important because it blends the marketing strategy and the overarching purpose of a business. Holistic marketing helps to create cohesion among different departments and components of the marketing strategy, contributing to the development of a solid brand identity.

The five main principles of holistic marketing are:

- 1) *Integrated marketing*. In integrated marketing, all the business's marketing activities connect to achieve shared goals. Integrated marketing emphasizes creating consistent imaging and messaging across all channels, including advertising, PR and social media. Additionally, integrated marketing involves creating cohesion among the promotion, communication and pricing strategies. Integrated marketing can help you develop a brand identity, and it can help the customer have a smooth and consistent experience with the business.
  - 2) *Internal marketing* focuses on the business's employees, including employee satisfaction. Employee satisfaction is important because it influences work quality and company success. Internal marketing focuses on creating consistent messaging for employees. For example, internal marketing may include thorough employee training to help team members feel confident in their abilities to perform their jobs. Additionally, internal marketing can

include managing collaboration between departments to achieve the primary marketing goals.

- 3) *Relationship marketing*. Relationship marketing aims to form long-term relationships with business customers. In relationship marketing, it's important that you know your customer well, including their likes, dislikes and needs, to establish a solid relationship. These relationships can lead to increased company loyalty and increased sales.
- 4) Socially responsible marketing. Socially responsible marketing focuses on the well-being of society. It's a way to show that your company cares about and is taking action on issues affecting your community. Socially responsible marketing includes: adhering to ethical standards, forming relationships with the community, attracting customers who want to making a difference through their purchases.

Socially responsible marketing is key to creating positive relationships with customers and the surrounding community.

5) Performance marketing. Another component of holistic marketing is performance marketing, which emphasizes the value created by marketing activities. It involves an online marketing structure in which companies only pay based on the success of their ad or campaign. For example, a company may pay a website a different fee depending on the number of clicks their ad receives. Performance marketing includes analyzing the performance of the marketing activities to ensure they are effective and profitable.

#### Marketing Management Process

Marketing management is the analysis, planning, an implementation the control over actions, aimed on an establishment, fastening and support of favorable exchanges with target buyers for the achievement of certain problems of the organization, such, as profit reception, sales volume growth, increase market share, etc.

The problem of marketing management consists in influence on level, time and character of demand that it helped the organization to achieve purposes.

For management of marketing activity of the enterprise four groups of questions have the greatest value:

- 1. Information
- 2. Use of elements (complex) of marketing
- 3. Organization of marketing activity
- 4. Control in marketing sphere.

In marketing system information has great value as any marketing activity is based on knowledge of the concrete situation which has developed on the market. The majority of marketing research in itself are information (for example, studying of product demand, research of sales markets, requirements of consumers to the product).

Besides, performance of marketing actions is need in feedback establishment to correct current influence and working out of the future marketing programs.

Absence of the necessary marketing information can become the reason of serious economic miscalculations. The purpose of use of the marketing information is reduction of uncertainty in the course of acceptance of administrative decisions.

It demands gathering, transfer, storage, processing and granting of considerable volumes of the versatile information. In detail process of accumulation of the information in pharmaceutical marketing will be described in separate section.

Use of marketing elements is directed on work with product, perfection of its consumer value, on price policy, creation of sale system, decision-making concerning methods and sale places, use of marketing communications and public relations.

In marketing management the main role has planning. Usually we believe that planning is studying the past to decide in the present what to do in the future, or deciding what we are going to do later, when and how we are going to do it, and who will do it. If you don't have a plan, you cannot get anything done – because you don't know what to be done or how to do it.

In business management one type of planning that we find very useful is the more formal concept called strategic planning.

Strategic planning may be defined as the managerial process of matching an organization's resources with its marketing opportunities over the long run.

Note that strategic planning is a total-company concept and that it involves a long-run orientation.

Planning may cover long or short periods of time.

Long-range planning (for 3, 5, 10, or even 25 years) usually involves top management and special planning staffs. It deals with broad, company-wide issues such as plant, market, or product expansion.

Short-term planning typically covers a period of one year or less and is the responsibility of lower- and middle-echelon executives. It involves such issues as planning next year's advertising campaign, making merchandise-buying plans in a store, or setting sales quotas for a sales force.

The planning activities in an organization may be conducted on three or four different levels depending upon the size of the organization and the diversity of its products or services.

Strategic marketing planning. At this level management is engaged in setting goals and strategies for the marketing effort in the organization.

Strategic marketing planning includes the selection of target markets and the development of the four major ingredients in a company's marketing program – the product, the distribution system, the pricing structure, and the promotional activities.

Marketing plan usually consist of such sections:

- description of current marketing situation (description of market, consumers, factors of the marketing environment, products of certain group, a competition, methods of sale and goods promotion);
- a substantiation and the description of the purposes of firm (short-term and long-term);
- data about results of markets forecasting;
- the description of marketing strategy on the markets;
- the description of marketing program actions;
- the budget (calculation of expected profits and expenses);
- the description of control procedures.

#### Marketing activities at the tactical level:

- studying markets in order to create demand and stimulate sales;
- analysis of goods and management of their range in order to maximally satisfy market requirements;
- direct contacts with consumers;
- increase and training of personnel;
- active participation in exhibitions and fairs;
- expansion of the range (diversification) of manufactured goods;
- creation and improvement of service efficiency;
- adaptation of the product to the specific requirements of the buyer;
- promotional events;
- price management

The organization of marketing activities, from a functional point of view, is the construction of a marketing structure (service) for management and control of the marketing work of an enterprise.

The marketing service must ensure the sale of more products with the required profits and maximum customer satisfaction.

#### Marketing organization models:

- Functional (The marketing service assumes that responsibility for the execution of each functional task is assigned to an individual or group of individuals);
- Commodity (In a commodity organization, each product has its own manager with a division of employees who perform all functional marketing tasks for this product);

- Regional (market) (Marketing is divided into individual markets or into individual market segments);
- Segmental (customer-focused orientation is based on the fact that each marketing manager is responsible for a specific market segment);
- Combined (matrix product-functional, product-market, by functions and markets, by functions and consumers - allows you to reduce duplication of marketing service employees).

**Basic stages** of the organization of pharmaceutical marketing services are allocated:

- determining of the prime purpose and problems of pharmaceutical marketing service on given enterprise;
  - working out of Statute about marketing service at the enterprise;
  - a substantiation of organizational structure;
  - service creation (groups, department, coordination council, etc.) marketing;
- determining of problems for separate divisions and its functional duties of marketing service workers.

*Overall aim* of pharmaceutical marketing service is optimization of processes of working out, manufacture and distribution of medical prod-ucts according to consumers needs.

The main tasks of pharmaceutical marketing service are:

- working out of the marketing program;
- market segmentation;
- gathering of the marketing information on the market, structure, dynamics of demand and factors, its defining;
  - forecasting of a market condition, dynamics of its changes;
- the analysis of a competitive situation and introduction of actions for increase of competitiveness of pharmaceutical enterprise' develop-ments for expansion of domestic market and export opportunities;
  - formation of product assortment;
- preparation and dispatch to potential customers of information ma-terials about developments of the pharmaceutical enterprise (association) and results of research;
- participation in works of organization of the external economic and scientific, technical communications with foreign partners;
- working out long-term, intermediate term and marketing current plans by each kind of pharmaceutical production;
  - formation of demand and stimulation of sale of the pharmaceutical goods;

- working out of advertising campaigns, realization of business ties with press,
   advertising agencies, radio and TV, etc.;
  - participation in formation of public relations, etc.

Marketing control refers to the process of monitoring and evaluating marketing activities to ensure they align with the overall marketing objectives and strategies of a business. The effectiveness and efficiency of marketing efforts are measured using marketing control/

*Control of marketing activities* is the process of measuring and evaluating the results of implementing marketing strategies and plans, performing corrective actions to ensure the achievement of marketing goals

This is a periodic, comprehensive, objective and carried out in a certain sequence check of the marketing activities of the enterprise and the compliance of marketing strategies with external conditions, during which the problems facing the enterprise appear/

Directions of marketing control:

- marketing goals and strategies, marketing plans (programs);
- marketing management process;
- organizational processes and structures;
- marketing mix elements;
- marketing events;
- marketing information, media;
- effectiveness of marketing activities (sales, market share, profit, efficiency, etc.)

#### The Marketing Control Process

As with any other business function, there is a process to follow that ensures the marketing control process's effectiveness. Precisely, the process associated with the annual-plan control (see the explanation of annual plan control below).

The process steps include:

- 1. *Goal setting* What do you want your campaign or activities to achieve?
- 2. **Performance measurement** How is the campaign performing. What precisely is happening. As an example, are you receiving more conversions on your eCommerce website? Are you generating more sales revenue?
- 3. *Performance diagnosis* Why is what's happening occurring? If you are not receiving the projected sales volume, what would you attribute the reason to? What if you are earning more than projected sales? Could it be that your pricing is too low?

4. *Corrective Action* – How will you correct the problem? If your marketing campaign performs lower than expected, what changes can you make to fix the issue? Were your goals unrealistic, or did you miss your target marketing?

#### Types of Marketing Control

There are four types of marketing control marketing managers can use to accomplish their analysis of marketing campaigns:

- 1. Annual Plan Control
- 2. Profitability control
- 3. Efficiency Control
- 4. Strategic Control

Slade

Annual Control Plan. Annual plan control is responsible for ensuring that the company reaches its financial and other goals. Financials include sales revenue and profits. Using the marketing control process, the marketing management team establishes its monthly, quarterly, semi-annual, and annual goals. Second, they monitor the performance of their goals in the market environment. Third, if any deviations from the objectives exist, management analyzes the problems to determine what and why it's happening. Fourth, management works to close any gaps between the issue and its goals.

There are four tools for measuring the annual control plan:

- 1. Sales analysis
- 2. Market share analysis
- 3. Marketing expense-to-sales analysis
- 4. Financial analysis

*Profitability Control.* The profitability control is where a company measures its products, regions, customer segments, and order sizes to help decide if they need to expand, reduce, or eliminate any products, services, or territories. The instrument used to determine the profitability measurements is a marketing profitability analysis.

*Efficiency Control*. Efficiency control's primary purpose is to use the data from the profitability analysis to educate the marketing staff on the implications of the marketing decisions made for the campaign.

The profitability analysis may reveal that the firm is earning weak profits on certain products, promotions, stores, or territories. Marketers may face decisions that include determining if there are efficient ways to manage the sales force, advertising spend, sales promotions, or distribution channels.

Strategic Control. The final part of the marketing control tool is strategic control. From time to time, marketing managers should reassess their strategic approach to the market environment. The approach managers use for reassessing the

market environment is the marketing audit. The marketing audit is a comprehensive, systematic, and independent examination of a company's marketing environment. It also includes the company's marketing objectives, strategies, and activities. The goal is to determine the firm's challenges and opportunities to recommend a strategic plan of action that helps improve the company's marketing performance.

#### PRACTICAL ASSIGNMENTS

**Task 1.** Determine which of the given definitions corresponds to the given category (connect with arrows).

Категорія	$\longleftrightarrow$	Визначення
1	2	3
Agreement		product or service offered to the target market
Need		a need supported by purchasing power
Demand		a set of managed parameters of marketing activity, manipulating which the management of the organization tries to best meet the needs of market segments
Offer		the process of choosing an assortment, pricing policy, distribution channels, product promotion in order to satisfy customer needs and obtain profit
Goods		a specific form of need satisfaction corresponding to the cultural level and personality of the individual
Exchange		a set of existing or potential sellers and buyers of some products, it is a place where transactions take place
Market		the amount of goods or services offered that producers are willing to sell at a certain price for a certain period
Marketing		object of sale, the usefulness of which is manifested in the form of certain actions, benefits or satisfaction of requirements
Service		commercial exchange of values between subjects
Complex marketing		the act of receiving a desired object from someone in exchange for something

Task 2. Schematically present the functions and subfunctions of marketing.

**Task 3.** To characterize the causes and tasks of the specified types of pharmaceutical marketing. Present the results in the form of a tab. 1.2.

The causes and tasks of modern types of marketing

The causes and tasks of modern types of marketing						
Type of marketing	Cause of marketing	Task of marketing				
1	2	3				
Conversion marketing						
Developmental						
marketing						
Counter-marketing						
Remarketing						
Synchromarketing						
Supportive marketing						
Stimulating marketing						
Domarkating						
Demarketing						
		,				

*Task 4.* Describe the main concepts of marketing. Present the results in the form of a tab. 1.3.

*Table 1.3* 

#### Characteristics of the main concepts of marketing

Concept	Basic provisions of the concept
1	2
The concept of production	
improvement	
Product concept	
Commercial effort concept	
The concept of integrated	
marketing	
The concept of social and	
ethical marketing	
The concept of holistic	
marketing	

**Task 5.** Schematically present the functions of marketing management at a pharmaceutical enterprise

### After completing the practical assignment, the student should acquire practical skills and abilities:

- determine the essence of the marketing system and its main elements, to be able to characterize them;
- distinguish functions and subfunctions of marketing;
- characterize the causes and tasks of various types of marketing (including pharmaceutical);
- conduct a comparative analysis of the evolution of marketing concepts;
- determine the functions of marketing management at a pharmaceutical enterprise.

#### SELF-CHECK TESTS

1

The type of activity aimed at meeting needs through exchange is called:

- A. Marketing
- B. Management
- C. Demand
- D. Selling

2

The marketing department of the Luga-Pharm pharmaceutical enterprise builds its activities on four main directions of the marketing mix. Specify an element of the marketing mix:

- A. Product
- B. Offer
- C. Demand
- D. Panel
- E. Consumer

3

The analytical function of marketing includes:

- A. Study of the product (product structure)
- B. Organization of production of new goods, development of new technologies
- C. Organization of the product promotion system
- D. Service organization
- E. Implementation of targeted product policy

4

The management of the pharmaceutical enterprise made a decision to update the secondary packaging of the medicinal product in order to attract the attention of the buyer. What kind of marketing was used in this situation?

- A. Product oriented
- B. Integrated marketing
- C. Demarketing
- D. Creative marketing
- E. Synchromarketing

5

The pharmaceutical enterprise, taking into account that health care attaches primary importance to the quality of medicines, directed its efforts to improving the quality characteristics of the drug. What marketing management concept does the firm use?

- A. Product improvement
- B. Improvement of production
- C. Modern marketing
- D. All answers are correct
- E. There is no correct answer

6

The pharmaceutical company focuses on different market segments, the consumers of which differ significantly in their purchasing behavior. What organizational structure of marketing management is the most optimal for him?

- A. Segmental organization of marketing
- B. Functional organization of marketing
- C. Regional organization of marketing
- D. Product marketing organization
- E. Product segment organization of marketing

7

The marketing service verified the results of the pharmaceutical company's work based on the study of data on the implementation of medium-term plans, the development of market segments, budget control and financial analysis. This level of marketing control is:

- A. Control of tactical planning
- B. Control of global goals and strategies of firms
- C. Control of planned hypotheses and forecasts
- D. Control of strategic planning
- E. Operational planning control

8

The head of a pharmaceutical company has decided to reduce the demand for goods because it cannot be satisfied due to insufficient production capacity and limited raw materials. Indicate what type of marketing was used in this case.

#### A. Demarketing

- B. Remarketing
- C. Conversion marketing
- D. Creative marketing
- E. Synchromarket

9

The marketing department of the manufacturing company has established a negative demand for the product. What will be the task of marketing management and the type of marketing?

- A. Demand formation, conversion marketing
- B. Demand equalization, synchromarketing
- C. Increasing demand, remarketing
- D. Decrease in demand, demarketing
- E. Stimulating demand, stimulating marketing

#### **10**

When studying the demand for medicinal products and medical goods, several types of it are distinguished. What kind of demand corresponds to a situation when the desire of consumers cannot be satisfied with the help of goods and services available on the market?

- A. Hidden
- B. Positive
- C. Negative
- D. Redundant
- E. Irrational

#### **TOPIC 2**

# THE MARKET AS AN OBJECT OF MARKETING. PHARMACEUTICAL MARKET, ITS FEATURES. STUDY OF THE PHARMACEUTICAL DRUG MARKET

**Students should know:** characteristics of the concepts of "market", "subjects" and "objects" of the market; types of commodity markets; classification of pharmaceutical markets; pharmaceutical market infrastructure; market conditions, segmentation of the pharmaceutical market.

**Basic terms and concepts**: pharmaceutical market; infrastructure, conjuncture and segmentation of the pharmaceutical market; capacity; market share; saturation; market coverage

#### **QUESTIONS**

- 1. The market as an object of marketing.
- 2. Pharmaceutical market as a type of commodity market, its functions and structure.
- 3. Classification of the pharmaceutical market.
- 4. Infrastructure of the pharmaceutical market.
- 5. Concept of the market conjuncture, its features in the pharmaceutical market.
- 6. Quantitative characteristics of the market: capacity, market share, saturation.
- 7. Segmentation of the pharmaceutical market. Characteristics of segmentation principles and criteria.
- 8. Selection of target market segments. Factors determining the market coverage strategy.

#### **SELF-CHECK QUESTIONS**

- 1. The market as an object of marketing: concept, conditions of existence, market elements, market mechanism, classification criteria.
- 2. The pharmaceutical market, its subjects and objects.
- 3. Functions of the pharmaceutical market.
- 4. Classification of the pharmaceutical market.
- 5. Infrastructure of the pharmaceutical market.
- 6. The concept of market conditions.
- 7. Characteristic features of the conjuncture on the pharmaceutical market.
- 8. The concept of commodity market capacity.
- 9. Market share, its definition.

- 10. Market saturation as an indicator of market quantification.
- 11. Concept of market segmentation.
- 12. Characteristics of segmentation principles.
- 13. Characteristics of segmentation criteria.
- 14. Concepts of "target market", "market window", "market niche".
- 15. Selection of target market segments.
- 16. Factors affecting the choice of market coverage strategy.
- 17. Methods of finding target market segments.

#### **OVERVIEW**

The theory of management and marketing can only be considered within organizational relations because the organization is located and functions <u>in the market and</u> is an object of management.

You are studying marketing this semester and can already define it. Let me remind you that marketing is the activity of an organization on the market that aims to satisfy the needs of consumers.

Therefore, we consider the activities of any organization on the market.

From the marketing point of view, any market consists of sellers and buyers who differ in their tastes, desires, and needs. They buy goods based on individual motivations.

From the point of view of marketing, buyers are called consumers.

The modern market economy is a complex economic organism consisting of a huge number of various production, commercial, financial and informational structures that interact against the background of an extensive system of legal norms of business and are united by a single concept - *market*.

**Market** - is a way of organizing social production, based on the freedom of entrepreneurship and the limited role of the state.

There are several definitions of the market, the essence of which boils down to the following:

**Market** - a set of socio-economic relations in the field of exchange, through which the sale of goods and services is carried out, the final recognition of the social nature of the work, as a result of which they are created.

Alternatively, **the market** is a sphere of exchange characterized by a system of economic relations between producers and consumers of goods.

The main ones *elements of the market* there is demand (coming from consumers), supply (coming from sellers) and the price that combines them. Interconnection forms them *market mechanism*.

The market performs certain functions:

- *informative* transfer of information to market subjects about number and range of benefits;
  - *intermediary* summary of sellers and buyers;
- regulating definition of what? as? and how much is produced through the ratio of supply and demand; this function in the pharmaceutical market is limited by the regulatory function of the state because there are groups of goods, the production of which is stimulated by the state, and not by customer demand.
- *price formation function* price formation through the interaction of supply and demand;
- *sanitary* purification of public production from inefficient economic subjects of the market.

Conditions of existence of the market there are:

- the presence of exchange, the ultimate goal of which is to receive goods and services;
- availability of suppliers and consumers (sellers and buyers);
- functioning of non-economic institutions (for example, educational organizations, banks);
- presence of competitors;
- existence of demand,
- saturation of the market with goods and services.

Such a concept as *market structure is used*, which defines the main economic characteristics that influence the behavior of market subjects and includes their number, size and location, purchasing power, assortment of goods and services, changes and differentiation of this assortment, conditions of appearance on the market new buyers and sellers, as well as their integration.

The structure of the market includes a system of economic relations, firstly, between producers and consumers of a given product, and, secondly, within groups of producers and consumers. The main form of relationships of the first type is - purchase - sale, the second - competition.

The market, in addition to the structure, necessarily has an infrastructure.

**Infrastructure** - (from the Latin Infra – under, sub), substructure - a complex of economic sectors that provide general conditions for the production and sale of marketable products and represents a system of enterprises that ensure uninterrupted, effective development of the market

Thus, if the market is a sphere of exchange, then the infrastructure is a system of components that ensures the normal functioning of this sphere of exchange.

These are bodies of legal and public influence, state regulation of export and import, means of transporting goods, commodity, commodity and raw material, stock, currency and financial exchanges, labor exchanges, banks, information and

communication bodies, commercial organizations that provide various services for companies on a contractual basis, scientific organizations, state bodies of control and supervision.

With a solidly formed infrastructure, any market can be considered fully realized.

All elements of the market infrastructure are grouped into three groups:

- <u>elements of the internal and external market</u> (including the system of education and science, registration, licensing, control and accreditation, banking, currency and exchange, arbitration and legal, customs, tax and insurance systems, information and communication, transport organizations, production, warehouse, trade, electronic machinery and equipment)
- <u>elements of only the foreign market</u> (foreign manufacturers and their representative offices, foreign trade firms, systems of international trade practice)
- <u>elements of the domestic market only</u> (domestic producers, wholesale enterprises, pharmacies, distilleries, the population and other market subjects)

Modern commodity markets, depending on one or another defining feature, are divided into different types:

- 1) From the standpoint of the economic space or depending on the scale (geographic location):
  - Domestic (wholesale retail, Ukrainian),
  - External (Czech)
  - Local (Zaporizhia)
  - Regional (center of Ukraine),
  - National (Ukrainian),
  - World (open and closed);
- 2) By saturation level
  - Balanced (demand matches supply)
  - Scarcity (demand is higher than supply)
  - Surplus (demand lower than supply)
- 3) By degree of maturity
  - Not developed
  - Developed (EU countries)
  - The one that is being formed (Ukraine)
- 4) Depending on the sphere of social production, which is market-oriented, distinguish:
  - The market of goods of material production (raw materials, foodstuffs, machines and equipment)

- The market of goods of spiritual production (achievements of science, technology, works of art, books, etc.)
- 5) In compliance with current legislation
  - Legal and
  - Illegal (relationships between sellers and buyers are established in violation of current legislation)
- 6) By market entities
  - Sellers' market (a market that is characterized by a shortage of goods and as a result, sellers have more power and the most active market players are forced to be buyers
  - Buyers' market (a market in which there is plenty of goods and therefore buyers have the opportunity to choose and the most active market players are forced to be sellers.
- 7) By nature of sales
  - Wholesale
  - Retail (to the market of individual consumers and the market of consumer organizations)
- 8) By market area:
  - Goods and services (commodity market),
  - Securities (financial market),
  - Workforce (labor market).
- 9) By type of client markets
  - Consumer market
  - Market of producers
  - Intermediary market
  - Market of consumer organizations
  - Market of state institutions
- 10) Depending on the structure of the market economy.
  - Markets of countries with a subsistence economy.
  - Markets of countries exporters of raw materials.
  - Markets of industrial and developing countries.
  - Markets of industrially developed countries.
- 11) by income level and the nature of their distribution in the country:
  - low-income countries.
  - deficient and very high income countries.
  - low, middle and high income countries.
  - mostly middle-income countries.
- 12) by the degree of restriction of competition

In more detail, I will focus on the classification of markets according to the degree of restriction of competition

**Competition (lat) - collision)** between product manufacturers for better, more economically advantageous conditions for the production and sale of goods

Economists distinguish four types of market, each of which has certain pricing principles:

- 1. A pure monopoly market (one seller affects the total volume of offers and the price, there are no analogues, high barriers to entry), that is, there is only one producer who fully controls the volume of production and has a strong influence on the price
- 2. *Oligopolistic market* (several sellers sell standardized or differentiated products, while the share of each of them in total sales is so large that changes in the quantity of products offered by one of the firms lead to a change in price). That is, a market dominated by a few large firms makes it extremely difficult for rivals to enter the industry. In the case of an oligopoly, price collusion or targeting the leader's prices is possible
- 3. **The market of monopolistic competition** a market with many manufacturers offering similar, but not the same (differentiated) goods and services (analog drug market)
- 4. *Market of pure free competition* (free sale and purchase). That is, a market with many equal sellers offering homogeneous products, where there are no entry barriers to the industry, and the seller practically does not affect the market price (synonymous drug market)
  - 13) according to the method of consumption of goods
    - consumer goods market,
    - production goods
    - services

The market is multifaceted and diverse; it operates according to its own laws. We are primarily interested in the commodity market.

Under *the commodity market* it is necessary to understand the scope of realization of a specific product (or group of products) connected by certain properties of a production or consumer nature.

This type of market also includes the market of medicines and pharmacy products.

The commodity market interacts through the mechanism of cross-industry competition, forming the national market as a whole.

**Pharmaceutical market** as a kind of commodity market is a system of buying and selling relations between sellers (pharmaceutical plants, factories, wholesale and retail establishments for the sale of medicinal products - pharmacies, pharmacies and

their structural subdivisions) and buyers (wholesale and retail links, medical institutions, other organizations, patients and their relatives).

Market relations are formed in the form of acts of purchase and sale and competition, in which subjects of the pharmaceutical market participate.

To *subjects* of The pharmaceutical market includes regulatory bodies and control over pharmaceutical activity; manufacturing, wholesale and retail enterprises and institutions; specialized marketing, analytical companies; educational institutions for training and advanced training of personnel; research institutes; pharmaceutical associations and other public organizations; medical and preventive institutions, outpatient and inpatient patients. Thus, that is, with **the subjects of the market** - these are sellers (owners of medicines and medical products) and buyers (owners of money).

**The objects** of their relationship are medicines, medical products, services, parapharmaceutical goods.

In comparison with other industries, the commodity on the pharmaceutical market is pharmaceutical products, most of which are <u>prescription drugs</u>, therefore, an important place in their implementation is assigned to the intermediate consumer - the doctor.

A significant part of pharmaceuticals belongs to the list of vital medicines, that is, they are products of strategic purpose that determine the health of the nation.

Thus, the Medicines Market is a specific type of consumer goods market, in which the subject of exchange is the means of vital necessity. This feature of the product distinguishes the drug market from the markets of other products.

The market of pharmaceutical products is characterized by:

- 1. An exceptionally **high degree of heterogeneity** (over 900,000 names) is associated with the vastness of the range of diseases that a person has to face.
- 2. It is practically impossible for any monopoly, no matter how big it is, to produce medicines for the treatment of all kinds of human diseases. Therefore, pharmaceutical **corporations strive to operate within clearly defined areas of the market** characterized by sufficient homogeneity, striving for the position of an absolute monopolist in narrowly profiled spheres of activity (monopolistic competition).
- 3. The market of pharmaceuticals is conditionally **divided into two parts.** The basis of the market is prescription drugs prescribed by a doctor. These drugs are bought in pharmacies only with a doctor's prescription.
- 4. Advertising of prescription drugs, as a rule, is directed not to the patient, but to persons of the medical profession. Approximately 90% of the drug market is prescription drugs.

- 5. In the market , the patient is not free to choose medicines. He even buys overthe-counter drugs based on the recommendations of medical professionals.
- 6. Narcotic, psychotropic and poisonous medicines **are sold** in many countries **with restrictions** (consumption regulations).
- 7. The market as a whole is characterized by the most **general volumetric parameters of the ratio of supply and demand,** namely, the amount of solvency of needs in pharmaceutical goods and the corresponding total amount of product supply.
- 8. The offered drugs are by their nature or original "branded" (brands), or resynthesized, reproduced using proprietary or licensed technology (generics).

### The concept of the conjuncture, its features in the pharmaceutical market. Quantitative characteristics of the market

In market research, the economic situation and the situation of individual markets are distinguished. *economic situation* characterizes the state of the entire market process for any period.

In general, concepts **"conjuncture"** (from lat. congungo, Italian congiuntura) in a broad sense means a set of conditions taken in their mutual connection, a transitional situation, situation, state of affairs.

**Economic situation** is a form of government in the market system of factors and conditions of reproduction in their constant development and interaction, which is expressed in a specific ratio of demand, supply and price dynamics.

**The conjuncture** characterizes the situation on the market in terms of the ratio between supply and demand, the level of prices, inventories, the volume of orders by industry and other economic indicators.

The conjuncture of the pharmaceutical market depends on the manifestation of all the factors listed above. Very important value among them is the life cycle of the product.

The conjuncture is characterized by variability, cyclicality and dynamism.

This is due to the fact that the situation on the market is unstable, there are constant changes in it. So-called market indicators are used to assess the market situation. Such indicators are prices, inventories, indicators of business activity.

They are considered to be characteristic types of commodity conditions

- growing
- high,
- decreases and
- low economic conditions.

The main signs of **the growing conjuncture**, which is formed in the conditions of a commodity deficit (predominance of demand over supply) is an increase in prices and an increase in the number of concluded agreements.

For a high (stable) conjuncture characterized by the relative stability of high prices and the most significant activity of consumers and suppliers.

**Downturn conjuncture** caused by the commoditization of the market (offers exceed demand) and is characterized by a decrease in market prices and a decrease in the number of concluded agreements.

**Low (sluggish) economic conditions** stable low prices and passivity of market subjects are inherent.

#### **Quantitative characteristics of the market**

Quantitative characteristics are used to describe the market.

The main among them are:

- Capacity (capacity)
- Market share
- Saturation

Capacity **of the commodity market** is understood as the possible volume of sales of goods (specific products of the enterprise) at a given level and ratio of prices. The capacity (capacity) of the market is characterized by the size of the population's demand and the amount of product offers.

The capacity of the actual market is the possible volume of sales of goods to consumers who are interested in certain goods and are able to purchase them.

The capacity of the market does not remain unchanged, it depends to some extent on the economic situation. When the economic situation falls, it decreases, and when it rises, it increases.

Therefore, when supplying goods to the market, the firm must correlate its market share with the objective framework of its capacity.

**Market share** is the specific weight of the firm's goods in the total capacity of a given sales market, expressed as a percentage (by sales volume).

$$Market share = \frac{Quantity of goods sold}{The total volume of sales of goods on a specific market (market capacity)} x 100\%$$

The market share can also be determined in a separate segment, the relative market share is calculated in comparison with competitors or with the leader.

Market share indicators characterize the competitiveness of the firm, and together with the dynamics of market share are used to control the results of marketing activities. Increasing market share is a key factor in achieving a leading position in the industry.

Another indicator of quantitative evaluation of the market is its saturation.

Market saturation is an indicator that characterizes the prospects for changes in demand in % and is defined as the ratio of the number of buyers who have already bought the product to the total number of buyers

$$N_{R} = \frac{Pk}{P} \times 100\%$$

Nr - market saturation

P – limited number of buyers

Pk – number of buyers who bought the product

The market is considered attractive for the company if this indicator is at the level of 10%, and at a saturation level of 85-90%, the market is unpromising.

#### Market segmentation. Characteristics of segmentation principles and criteria

It is known that any market consists of buyers who differ from each other one with their tastes, desires, needs and motives for making purchases. Therefore, manufacturers and representatives of sales organizations should be aware that it is impossible to take into account such a variety of factors that influence the decision to purchase the offered goods and services in conditions of competition, if one focuses on the entire market.

**Market segmentation** - this is the division of consumers into groups (segments) according to defined criteria and features. Segmentation is carried out with the aim of maximum satisfaction of consumer demand in various products, as well as rationalization of the costs of the manufacturing company for the development of the production program, production and sale of the product.

The basis of market segmentation is the accounting of individual preferences of different categories of consumers. It allows you to select certain groups (market segments) from the total number of potential consumers that have more or less uniform requirements for the product.

Thus, **a market segment** is <u>a specially selected part of the market</u>, <u>a set of</u> consumers who respond in the same way to the same incentives.

When segmenting consumer markets, the following are used *principles*:

- 1. **Geographical** (distribution of markets into countries, regions, districts, cities, etc.).
- 2. **Demographic** (distribution of consumers by gender, age, family size, income level, occupation, etc.).
- 3. **Psychographic** (division of consumers by social class, lifestyle, personality characteristics, social status).
- 4. **Behavioral** or by consumer motivation (division of consumers depending on knowledge, relationships, nature and intensity of product use and reaction to this product).

Most often, market segmentation is carried out according to different types of end consumers of the product and according to the importance of the customer.

**A criterion** is an indicator on the basis of which something is evaluated, defined or classified (in our case, the market).

- Quantitative parameters of the segment (capacity of the segment, that is, the number of products sold and their total value, the number of potential consumers, the area where they live, etc.).
- Availability of the segment for the enterprise, i.e., the enterprise's ability to obtain product distribution and sales channels, storage conditions, and transportation of products in this market segment.
- The essence of the segment, i.e. the definition of how real this or that group of consumers can be considered as a market segment and how stable it is based on the main unifying features. At the same time, the indicators of growth or decline in the number of main consumers are analyzed.
- **Profitability** . On the basis of this criterion, it is determined how profitable it will be for the company to work in the selected market segment. At the same time, standard methods of calculating relevant indicators are used: profit rates, income on invested capital, the amount of dividends per share, the amount of growth in the total mass of the company's profit, etc.
- Compatibility of the segment with the market of the main competitors. Using this criterion, it is possible to determine: how stable a competitor's products are in a given segment, whether it is worth introducing your own products in this particular segment at all, creating additional costs, or it is better to look for a completely new one, where the competition will be clearly weaker.
- Efficiency of work in the selected market segment. This criterion means, first of all, checking whether the enterprise (firm) has the appropriate work experience in this market segment (this is the qualification and professionalism of employees, the correct arrangement of personnel, cohesion and responsibility of the team as a whole, etc.).
- **Protection of the selected segment from competition**. In this case, an analysis of one's real and potential opportunities to compete in the selected market segment is carried out. It is important to determine the strengths and weaknesses of an enterprise (firm) that produces similar products, as well as its own comparative advantages and disadvantages in order to develop the former and eliminate the latter.

Directly for the pharmaceutical market, all the above criteria are very relevant. In addition, segmentation of the pharmaceutical market is carried out taking into account the main factors. These factors can be sub-segments of the market, by which different groups of consumers are analyzed.

I can serve as such factors:

- medical (morbidity of the population, number of hospitals, doctors, availability of medical insurance systems, etc.);
  - geographical (region, country, number, population density, climate);
  - demographic (age groups, gender, large number of children);
- social (income level, predominant occupation, level of education, national traditions, etc.);
  - psychographic (social strata, lifestyle);
- behavioral (status of regular customers, degree of need for drugs, loyalty of doctors in relation to the pharmaceutical company, degree of willingness of doctors to prescribe and patients to purchase this or that specific drug, emotional attitude to the company's product, etc.).

In addition to segmentation by consumer groups, you can also segment by product. This type of segmentation is especially important for the release and sale of new products (characteristics, price, special qualities, reliability, ease of use, availability of purchase, etc.).

Recently, fierce competition has been taking place in all spheres of the economy, therefore the data obtained during **the segmentation by main competitors acquire an essential value for the enterprise (firm)**. When carrying out this type of segmentation, the factors of own and competing enterprises should be compared. These factors include:

- 1. Product (quality, availability of analogues, brand prestige, packaging, expiration date, range of indications, variety of dosage forms, availability for purchase, etc.).
- 2. Price (percentage discount from the price, tax discount, payment term, etc.).
- 3. Sales channels (forms of sales, degree of market coverage, inventory control system, transportation, etc.).
- 4. Promotion of products on the market (advertising, individual implementation, television marketing, mention in mass media).

The data necessary for this kind of analysis are provided by the economic services of the enterprise.

The selection of the "target market", "market window", "market niche" is of practical importance.

- **1.** A target market segment is one or more segments selected for marketing activities of this company.
- 2. The market window is a segment of the market that was rejected by the manufacturers of the corresponding products, it is the unsatisfied needs of consumers. The market window is a group of consumers whose specific needs

cannot be directly satisfied by the product offered on the market, but are satisfied by using other products.

The most obvious example of a market window in the field of medical provision of the population is a limited assortment of children's medicinal forms. The need of children is often satisfied due to the dosed use of medicines intended for adults.

**3.** A market niche is a segment of the market for which the products of this company and its delivery capabilities are the most optimal and appropriate

#### There are 2 methods of finding target segments:

- *concentrated* (presupposes the sequential development of the FF of the necessary number of segments. If at the same time one of them turns out to be unprofitable, it is abandoned and they start working with another)
- *dispersed method* (involves entering the maximum possible number of market segments at once in order to be able to select the most promising ones).

When deciding on entering the market, the possibilities of its segmentation, the firm can use 3market coverage strategies:

- *mass (undifferentiated) marketing* (oriented to a wide consumer market using one basic marketing plan, while market segmentation is not carried out. In pharmaceutical practice, this type of marketing is used to promote broadspectrum drugs (antibiotics), as well as symptomatic drugs that are used for treatment of various disorders of the functional systems of the body, which have the same symptoms, but different etiology (analgesics, anti-inflammatory, sleeping pills. The main goal of mass marketing is to increase sales as much as possible)
- *targeted or concentrated marketing* (targeted at a narrow specific group of consumers (market segment) through a specialized marketing complex aimed at meeting the needs of this particular segment. The choice of such a strategy is typical for specialized enterprises that produce products for a specific purpose in limited quantities (onco, cardio profile)
- *differentiated marketing* ( involves covering several market segments and developing a separate marketing complex for each of them. This type of strategy can be used for drugs **of specific action.**

The following factors influence the choice of strategy:

*Enterprise resources*. When they are limited, the most optimal is the strategy of concentrated marketing.

The degree of homogeneity of products. Undifferentiated marketing is acceptable for the same products. Commodity-differentiated or concentrated - used for different products.

*Product life cycle stage*. When introducing a new product to the market, one of its variants is offered, and the strategy of undifferentiated or concentrated marketing is used.

The degree of homogeneity of the market. The uniformity of consumer tastes, the volume of purchases and the time of their execution, along with a similar reaction to the same marketing stimuli, implies the use of undifferentiated marketing.

Marketing strategies of competitors. In the conditions of market segmentation by competitors, the company should not pursue a strategy of undifferentiated marketing. If competitors use undifferentiated marketing, competitive advantages can be obtained through the use of differentiated or concentrated marketing strategies.

In the process of forming the target market segment, companies can focus on market niches and market windows.

#### PRACTICAL ASSIGNMENTS

- **Task 1.** Schematically present the classification of pharmaceutical market subjects.
- **Task 2.** Present the classification of the pharmaceutical market in the form of a scheme.
- **Task 6.** The pharmaceutical manufacturing enterprise "Magnolia" has seen a significant decrease in the sales volume of released medicinal products over the past six months. The enterprise specializes in the production of generic medicines. Due to a lack of experience, the company's management does not have a clearly developed marketing program, and most importantly, they have not decided on the choice of the target segment. Help the management of the "Magnolia" enterprise to segment the drug market according to the main principles and criteria. Write the answer in the form of a diagram.

After completing the practical assignment, the student should acquire practical skills and abilities:

- carry out classification of pharmaceutical market subjects;
- carry out classification of the pharmaceutical market
- carry out segmentation of the pharmaceutical market.

#### SELF-CHECK TESTS

1

The system of purchase and sale relations between economically free sellers and buyers of medicines and medical items is:

- A. Implementation of medicines
- B. Pharmaceutical sales agents

#### C. Pharmaceutical market

- D. Pharmacy
- E. Pharmacy warehouse

2

The regional pharmaceutical market is characterized by a large number of pharmaceutical firms, none of which affects the level of market prices. The companies represent interchangeable medicinal products. Determine the type of market:

#### A. Market of pure (free) competition

- B. Market of monopolistic competition
- C. Oligopolistic market
- D. Pure monopoly market

3

One of the important characteristics of the market is the commodity conjuncture. What kind of commodity conjuncture is characterized by the relative stability of high prices and the greatest activity of consumers and suppliers?

- A. High (stable) conjuncture
- B. Slowing conjuncture
- C. Falling conjuncture
- D. Sluggish conjuncture
- E. Low conjuncture

4

For a better understanding of the requirements of consumers of medicinal products, the manufacturing company divides consumers into groups (segments) that differ in relative homogeneity of demand, tastes, and preferences. What is the name of this activity of the enterprise?

- A. Market segmentation
- B. Positioning
- C. Sales activity
- D. Market research
- E. Demand analysis

5

The marketing department of the "Virsavia" enterprise, which specializes in the production of antiaging medical cosmetics, divided consumers into groups

depending on their social status. What principle of market segmentation is the basis of this division:

- A. Psychographic
- B. Geographical
- C. Demographic
- D. Demographic
- E. On the motivation of consumers

6

The marketing department of the "Aphrodite" enterprise, which specializes in the production of antiaging medical cosmetics, divided consumers into groups depending on age. Which principle of market segmentation is the basis of this division:

- A. Demographic
- B. Geographical
- C. Social-economic.
- D. Psychographic.
- E. Behavioral

7

The marketing department of the "Arterium" corporation, in order to substantiate the feasibility of offering a medicinal product in the market segment, identified characteristic features that distinguish the product from similar competitor products. To determine the market niche, specialists conducted:

- A. Positioning of the pharmaceutical product
- B. Certification of pharmaceutical products
- C. Bar coding of pharmaceutical products
- D. Clinical trials of a pharmaceutical product

8

Which version of the product strategy is characterized by bringing to the market a product designed for the largest market segments and the largest number of buyers?

- A. Undifferentiated marketing
- B. Differentiated marketing
- C. Concentrated marketing
- D. Diversification
- E. Variation

A small pharmacy enterprise specializes in the extemporaneous production of ophthalmic dosage forms according to the prescriptions of ophthalmologists of the regional clinical hospital. What marketing strategy does the pharmacy use?

- A. Targeted (concentrated) marketing
- B. Mass (undifferentiated) marketing
- C. Differentiated marketing
- D. Social and ethical marketing
- E. Integrated marketing

10

A set of micro- and macro-environmental factors that cannot be controlled outside the enterprise and affect the possibility of managing the enterprise by the marketing service are:

- A. Marketing environment of the enterprise
- B. Features of insurance medicine
- C. Social marketing factors
- D. Marketing communications
- E. External influence on the enterprise

#### **TOPIC 3**

# MARKET DEMAND AND SUPPLY. FEATURES OF THE FORMATION OF DEMAND FOR MEDICINAL PRODUCTS

**Students should know:** characteristics of the concepts "demand" and "supply", their relationship; elasticity of supply and demand and factors affecting it; types of demand and corresponding tasks of marketing; peculiarities of the formation of demand for medicinal products

**Basic terms and concepts**: need, demand, supply, law of demand, law of supply, market equilibrium, elasticity of demand, elasticity of supply

#### **QUESTIONS**

- 1. Characteristics of concepts: need, demand, supply. The importance of these elements of the market economy in the theory of marketing.
- 2. Law of demand, law of supply, market equilibrium. The main trends in the development of supply and demand.
- 3. Price elasticity of demand. Types of price elasticity of demand and factors affecting it.
- 4. Income elasticity of demand. Characteristics of the coefficient of income elasticity.
- 5. The concept of cross elasticity of demand. Characteristics of the value of the coefficient of cross elasticity.
- 6. Elasticity of supply. Factors affecting the elasticity of supply.
- 7. Types of demand. Marketing tasks with different types of demand.
- 8. Study of supply and demand for medicinal products.
- 9. Features of the formation of demand for medicinal products in the process of marketing activities.

#### **SELF-CHECK QUESTIONS**

- 1. Characteristics of the concepts "need", "demand" and "supply".
- 2. Law of demand.
- 3. Law of supply.
- 4. Market equilibrium.
- 5. The main trends in the development of supply and demand.
- 6. The concept of elasticity of demand.
- 7. Types of elasticity of demand.
- 8. Price elasticity of demand.
- 9. Factors affecting the price elasticity of demand for medicinal products.
- 10. Income elasticity of demand.
- 11. Characteristics of the coefficient of income elasticity.
- 12. The concept of cross elasticity of demand.

- 13. Characteristics of the value of the coefficient of cross elasticity.
- 14. Elasticity of supply.
- 15. Factors affecting the elasticity of supply.
- 16. Types of demand.
- 17. Marketing tasks with different types of demand.
- 18. Methods of studying supply and demand for medicinal products.
- 19. Features of the formation of demand for medicinal products in the process of marketing activities.
- 20. Limitations in the formation of demand for medicinal products.

#### **OVERVIEW**

Modern pharmaceutical business lives according to the laws of the market economy.

Since the time of Adam Smith, the main goal of an entrepreneur and the incentive for his activity is to obtain his own benefit by maximally satisfying needs of the buyer, supported by his solvency.

Studying people's needs is the most important task of marketing.

The need is it is a need for something objectively necessary for life and personal

**Demand** - this is the consumer's need, supported by his purchasing power or solvency need, i.e., the amount of money that buyers can and intend to pay for the goods (services) they need.

Demand in the pharmaceutical market is defined as *number* medical means, other goods of the pharmacy assortment, pharmaceutical services (in monetary terms), as needed and may be assigned or purchased by consumers (intermediate and final) for a certain period of time at a certain price.

The amount of demand - the amount of goods that buyers are ready to buy at a given price at a certain time and in a certain place.

The amount of demand for the product is determined by the influence of the following factors:

- buyer's need for this product
- consumer income
- price of this product
- price of a similar product
- price of an additional product
- consumer purchasing power
- the opinion of the consumer regarding the prospects of his economic wellbeing

The dependence of the amount of demand on its determining factors is called the demand function

**Demand function** in the market mechanism, it is decisive, because it forces production to produce what is needed by the population goods, improve their quality and assortment. Demand, in turn, depends on the needs of people: as needs change, so does demand, which essentially represents a monetary expression of needs.

**Supply** characterizes the willingness of the seller to sell a certain amount of one or another product in a certain period of time.

**Supply** – it the ability and willingness of sellers to offer a certain amount of goods at a given price in a certain period of time.

The offer is characterized, first of all, by *the amount of the supply* - the amount of goods that sellers want and can sell at a given price. Thus, they must have a desire (agreement to sell the product at a given price) and an opportunity (availability of the necessary quantity of goods) to sell the product in a given quantity.

The function of supply is generally to connect production with consumption, sale of goods with their purchase. Responding to the emerging demand, the production begins to increase the production of the necessary goods, improve their quality and reduce their production costs, thereby increasing the total volume of supply on the market.

The main objective economic laws of the market are the laws of demand and supply, and the tools of the market are demand, supply, and price.

*Law of demand* expresses the relationship between the relative price of the product and the volume of demand for him:

Other things being equal, there is an inverse relationship between the price of the product and the volume of demand, i.e. an increase in price leads to a decrease in demand and vice versa. (when prices rise, demand falls and supply and demand. As a result, the equilibrium price and the equilibrium volume of sales are established)

The law of demand has a generally accepted graphic representation in economic theory (Fig. 3.1). It is necessary to distinguish *changes between in the volume of demand* and *changes in demand* (Fig. 3.2).

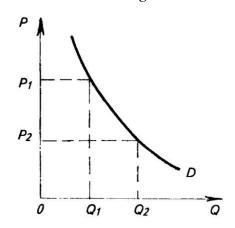


Fig. 3.1. Demand curve

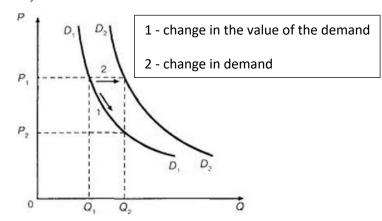


Fig. 3.2. Change in the volume of demand and shift of the demand curve

The demand curve shows:

- at a low price, the product will be able to buy a more significant number of buyers, since low prices encourage many buyers to prefer this product to others;
- if the prices for the goods are high, a certain number of buyers will refuse to buy, i. e. what the lower the price, the more demand.

At the same time, both price and non-price factors are involved.

*Price factor:* price change leads to changes in magnitude demand which is graphically represented movement along the demand curve.

The price factor is the most important, but not the only, factor affecting demand. In addition to the price, the market demand is influenced by non-price factors, which are called determinants of demand

*Non -price factors* lead to a change in demand, which is graphically represented a shift in the demand curve.

It should be noted that the law of demand is not absolute. There are exceptions to this law:

- an increase in price is accompanied by an increase in demand;
- a price decrease is accompanied by a decrease in demand;
- stable demand for traditionally expensive goods;
- purchase from analogs of the most expensive.

The interaction between supply and price reflects *law of supply:* Other things being equal, there is a direct relationship between the price of the product and the amount of the offer, i. e an increase in price leads to an increase in supply, and vice versa. (when the price increases, the supply also increases) (Fig. 3.3)

An increase in the demand for a product prompts the manufacturer to increase the production of this product. It is natural that the increase in the production of products used by demand makes it possible to increase its price.

As with demand, a distinction should be made *change in the supply volume* and *change offers*(Fig, 3.4).

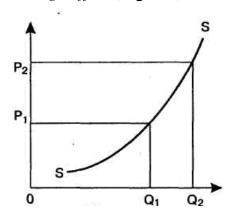


Fig. 3.3. Supply curve

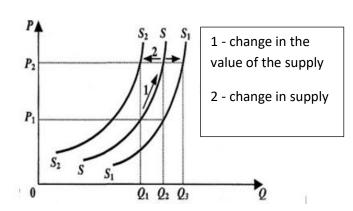


Fig. 3.4. Change in the volume of supply and shift of the supply curve

On the value of the offer affect supply factors (determinants of the offer). The main determinant is the price of the product, affecting the offer according to the law.

A change in the volume of supply takes place when the price of the product changes and the nature of the dependence of the volume of supply on the price is unchanged (1 - movement along the supply curve). For example, as can be seen in Fig. 3.4, when the price increases with P1 to P2 the supply volume increases from  $Q_1$  to  $Q_2$ .

In addition, there are a number of other factors that are commonly called nonprice supply factors.

Non-price factors of the supply (non-price determinants of the offer) - factors that affect the amount of the offer and are not related to the price of the product. When non-price factors change, the amount of supply changes at given price values; thus, the supply curve shifts.

In this case, they usually talk about a shift in the supply curve. When supply increases, the curve shifts to the right when decreasing - to the left

To non-price factors include:

- Change of prices for production factors (prices of resources)
- Technological progress
- Increase in demand for other goods
- Donations and subsidies
- Number of producers
- Waiting for manufacturers

#### Interaction of supply and demand. Market equilibrium

Therefore, the interests of buyers, who represent demand, and the interests of sellers, who represent supply, collide in the market. Buyers offer the demand price, i.e. the maximum price they are willing to pay when buying a given amount of goods, and sellers, in turn, offer the offer price, i.e. the minimum price for which they are willing to sell the same amount of goods.

In conditions of free competition it is assumed that each act of exchange is the result of a voluntary agreement between the buyer and the seller at a price that suits them both, that they behave rationally, that is, they act in their own interests, trying to get the maximum benefit.

Graphical interpretation is most convenient for theoretical purposes because not only allows you to find the general price of supply and demand, but also clearly shows the patterns associated with it.

For that to introduce you to it graphically, it is necessary to superimpose the supply and demand curves on top of each other. The point of intersection of the demand curve and the supply curve is characterized by the volume and price of the product, which suits both sellers and buyers. This is *the equilibrium point E* (Fig. 3.5).

The state of the market, in which demand and supply are balanced at a certain price level, is called equilibrium, optimal.

Market equilibrium is a state in which none of the economic subjects has any motivation to change it (the market is balanced)

On the contrary, at any other price level, the amount of supply and demand does not match.

1) If the actual price is higher balanced  $(P_I > P_E)$  there is an oversupply. The situation in the market, in which the volume of supply exceeds the volume of demand, is called a surplus.

2) If the price is below the equilibrium  $(P_2 < P_E)$  there is an excess of demand or an insufficient amount of the product - a shortage. A market situation in which the amount of demand exceeds the amount of supply is called a deficit

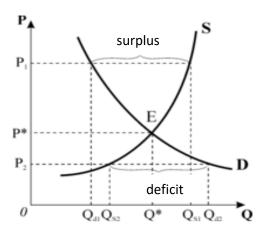


Fig. 3.5. Market equilibrium (E - equilibrium point; (E - equilibrium), "the meeting place of demand and supply");Pd=Ps=Pe; Qd=Qs=Qe)

But the market equilibrium is unstable because changes in market demand and market supply cause a change in the market equilibrium.

The price at which the product is actually sold or bought is called the market price and, by the way, does not necessarily coincide from equilibrium. The selling (market) price may vary from deal to deal, depending on the wishes and capabilities of specific sellers and buyers. No coincides with the equilibrium, as a rule, and the real volume of sales.

An equilibrium state of the market is characterized by the lack of incentives for sellers and buyers to change their decisions regarding the conditions of purchase and sale. However, the equilibrium state is inherently unstable, as the market conditions that determine it are constantly changing, causing fluctuations in supply and demand. It is the mechanism of supply and demand fluctuations that forces the economy based on market principles to develop. The result of these fluctuations is the restoration of the lost balance at the former or new level.

The ability of supply and demand to adapt to changing market conditions is called *elasticity*.

*Elasticity* means the degree of sensitivity of a change in one value to a change in another value/

*Elasticity* is considered in economic theory supply and demand - the ability of supply and demand to adapt to changing market conditions.

Elasticity is measured by *the coefficient of elasticity* (*E*), which is a measure of the sensitivity of supply and demand to changes in any factors on the market

**Price elasticity of demand** is the degree of quantitative changes in demand under the influence of price changes.

The dependence of the amount of demand on the price is characterized by the coefficient of price elasticity ( $E_d$ ), which is calculated by the formula:

$$E_d = \frac{Q_1 - Q_0}{Q_0} : \frac{P_1 - P_0}{P_0}, \quad E_d = \frac{\%}{\%}$$
 demand change price change

Where Q  $_{\mbox{\tiny 0}},$  Q  $_{\mbox{\tiny 1}},$  - the number of purchased goods;  $R_{\mbox{\tiny 0}},$   $P_{\mbox{\tiny 1}}\text{-}$  the price of the product,

The coefficient of price elasticity *(Ed)* shows by how many percent the amount of demand will change when the price changes by 1%

Ed is always < 0 (a negative value), since there is an inverse relationship between the volume of demand and the change in price. Therefore, its absolute value (|E|) is used.

If  $|E_a| > 1$  - demand is elastic (the price changes less than the amount of demand changes); at  $|E_a| < 1$  - demand is inelastic (the price changes more than the amount of demand changes); if  $|E_a| = 1$  - single or unitary demand (price and quantity of demand will change equally); if  $E_a$  equals =0 - demand is absolutely inelastic (price changes - demand is constant); if  $|E_a|$  infinity =  $\infty$  is perfectly elastic (the price is constant - the amount of demand changes).

A number of factors, which can be divided into two groups, influence the amount of demand for pharmacy products:

- price determinants;
- non-price determinants.

Price determinants affect the degree of elasticity of demand, i.e. they determine the angle of inclination of the demand curve.

Non-price determinants do not affect the degree of elasticity, but only shift the demand curve to the right or left.

The main factors of *price elasticity of demand* include: availability of substitutes for this product; time factor; the importance of the product for the consumer or measure of need for the product; the specific weight of the product in the consumer's income; character of consumers.

The most important non-price determinants include: consumer income; tastes and preferences; change in the spectrum of product use; the price of related goods (interchangeable, complementary and independent); consumer expectations about future prices; change in the number or structure of consumers.

*Income elasticity of demand (I - income)* shows how much percent the demand for the product will change (D) when consumer incomes change (I) on 1%

The relationship between income and demand is described by the profit elasticity coefficient, which is calculated according to the formula:

$$E_i = \frac{Q_1 - Q_0}{Q_0} : \frac{I_1 - I_0}{I_0}, \frac{\text{change in demand}}{\text{change in income}} \frac{\%}{\%}$$

Where  $I_0$ ,  $I_1$ , - income;  $Q_0$ ,  $Q_1$ - the number of purchased goods.

If E i < 0, then the product belongs to the "lower category of goods", since an increase in income is accompanied by a drop in demand for the product, i.e. the consumer seeks to replace it with a product of better quality.

If E i>0, the product is standard with the growth of income, the demand for this product also increases. Among the normal products, you can highlight 3 groups:

- *essential goods*, the demand for which is growing slower income growth  $(0 < E_i, < 1)$  and therefore has saturation limit;
- **goods of "second necessity**", the demand for which is growing as incomes grow (E =1);
- *luxury items*, demand for which is ahead of income growth E i>1 and therefore does not have a saturation limit.

*Cross elasticity of demand.* Prices for related goods are also the main non-price factor affecting demand.

It is necessary to distinguish between interchangeable, complementary and independent goods.

To measure the dependence of demand on the price of related goods, *the cross-elasticity coefficient is used*, which is calculated according to the formula:

$$E_{XY} = \frac{Q_{1X} - Q_{0X}}{Q_{0X}} : \frac{P_{1Y} - P_{0Y}}{P_{0Y}}, = \frac{\% \Delta Qx}{\% \Delta Py} = \frac{\text{change in demand for the product X\%}}{\text{price change Y\%}}$$

Where  $Q_0$ ,  $Q_1$ - the quantity of goods purchased X;  $P_0$ ,  $P_1$ - the price of the product Y,

The cross-elasticity coefficient shows how the amount of demand for product X will change before the product price changes Y on 1%

It can be positive (for *interchangeable goods*), negative (for *complementary goods*) and zero (for independent goods).

The greater the value of the cross-elasticity coefficient, the stronger the relationship between goods. And vice versa: the closer the coefficient is to zero, the weaker the substitution or complement relationship.

*Elasticity of supply*. The dependence of supply on price is characterized by *the supply elasticity coefficient* (E<sub>s</sub>), which shows the percentage change in supply when the price changes by 1% This value is always positive. The following formula is used to calculate the elasticity of supply:

$$E_s = \frac{Q_1 - Q_0}{Q_0} : \frac{P_1 - P_0}{P_0}, \quad = \frac{\% \Delta Q}{\% \Delta P} = \frac{\text{change of supply \%}}{\text{price change \%}}$$

Where  $Q_o$ ,  $Q_i$ - the quantity of the offered product at the corresponding price;  $P_o$ ,  $P_i$ - product prices.

In case when the increase in supply exceeds the increase in prices, the latter is characterized by as elastic ( $E_s > 1$ ).

If the increase in supply is equal to the increase in prices, the supply is called unitary, and the elasticity index is equal to one.

When the increase in supply is less than the increase in prices, the so-called inelastic supply is formed (E s < 1).

Similarly to the determinants of demand, the difference in the influence of price and non-price determinants on the amount of supply can be traced on the graphs of the supply curves. Price determinants affect the degree of supply elasticity, i. e they determine the angle of inclination of its curve. Non-price determinants do not affect the degree of elasticity, but only shift the supply curve to the right or left

To primary *price determinants* suggestions include: time factor; features of technological and production cycles.

*Non-price determinants* exert a much more significant influence on the change in supply: resource prices; level of technology; prices for interchangeable and complementary goods; activity of the state in the economic sphere; number of sellers on the market.

There are several types of demand: negative, absent, hidden, decreasing, irregular, full, excessive, irrational.

We consider only *solvent demand*. From the point of view of economic theory, such demand is called *valid*.

Actual demand in the pharmacy is the total volume of demand presented by consumers at a certain moment in time. It is determined by the amount of money that consumers are willing to spend on the purchase of goods, provided they fully meet the requirements.

Consumer demand can be considered completely *satisfactory* if all necessary drugs are available.

If the buyer is ready to buy synonyms or analogues of drugs recommended by the doctor, then we are dealing with *hidden unsatisfied demand* - the demand that was implemented in the conditions of the need to buy goods that will replace drugs that are not available in the pharmacy at a specific moment in time. In case if the buyer refuses the replacement, the demand goes into the category *of unfulfilled*.

Unrealized demand in the pharmacy is divided into two main types - *delayed* and clearly unsatisfied demand. If the drug is not available, the pharmaceutical worker offers the customer to come in later, when the currently unavailable drug will be available. If the buyer agrees, such demand is called *deferred*. This category demand includes drugs "to order". If the buyer does not agree to wait, then in this case there is a place *clear unsatisfied demand*.

When studying the demand for medicinal products, it is customary to distinguish

- realized (satisfied),
- unsatisfied demand and
- the demand that is formed

*Realized demand* - the actual sale of medicines with sufficient and constant availability of them in the pharmacy network.

*Unsatisfied demand* - demand for medicinal products that enter the pharmacy network in insufficient quantities or unevenly.

Forming demand is the demand for new and little-known medicines.

#### Study of demand and supply of medicinal products

Let's consider the methods of researching the demand and supply of medicinal products as important directions of studying the economic situation, directly related to the satisfaction of consumer needs.

The analysis of the formation of demand for medicinal products and the forecast of its development prospects is one of the main stages of marketing research of the pharmaceutical market. The demand for medicines depends on many factors, including demographic, social, economic, public health, etc.

To study demand *sociological research* is most widely used for medicinal products, in particular, surveys of the population and medical personnel in the form of questionnaires or interviews and studying the opinions of experts.

In addition to the above methodology, demand forecasting uses:

- *normative method* (based on objective statistics of morbidity and optimal sets of drugs for a course of treatment),
- *expert evaluations* (is based on obtaining objective assessments as a result of subjective opinions of experts and specialists),
- *extrapolation methods* (based on the statistical analysis of time series and allow forecasting the growth rate of consumption of goods in the near future based on the trends of the past period),
- methods of mathematical modeling, grouping and processing of data (Carried out taking into account the correlation of demand and factors affecting its value),
- and the index method (based on relative indicators of dynamics, which express the ratio of the actual level of the analyzed indicator in the reporting period to its level in the base period),
- *method of qualimetry* (based on the determination of the utility function or consumer preferences in quantitative terms)

In the case of the effect of several factors on demand, it is suggested to use *Economic and mathematical models* used in the event of the effect of several factors on demand

#### Studying the supply of medicines provides:

- a) study of existing production facilities, conditions for their expansion and improvement;
  - b) collection of data on supply and sources of supply of medicines.

Research may also refer to the causes of changes in the offer, prerequisites that allow predicting these changes, measures affecting the offer, as well as ways of their introduction into the enterprise management system.

Research of drug offers by wholesale and retail firms, pharmacy enterprises allows to justify decision-making regarding cooperation with individual suppliers.

#### Peculiarities in the formation of demand for medicinal products

A number of factors influence the formation of demand for medicinal products.

Objective factors includes: socio-demographic, geographic and economic factors; medicinal properties drugs, their quality and place on the market; informational and advertising support for product promotion.

*Morbidity*, which should be attributed to a number of objective factors, is of decisive importance in the formation of demand for medicinal products.

There is another objective factor. It is related to the order of dispensing medicines in pharmacies and their distribution into prescription and non-prescription drugs.

Speaking about the recipe and the drug, it is necessary to keep in mind that demand in these drugs is formed by doctors who write prescriptions. The patient compares the usefulness of the drugs prescribed to him with his financial capabilities and makes the final decision on their purchase.

The demand for over-the-counter drugs is formed under the influence of advertising in the mass media, in pharmacies and medical institutions. A recommendation for admission can also come from a doctor or pharmacist. However, in Ukraine there are restrictions on the advertising of over-the-counter drugs.

An important characteristic of the formation of demand for medicinal products is restrictions associated with the promotion of prescription drugs.

To subjective factors, which determines the demand, the level of buyers' needs, their values, cultural traditions, state of awareness, and past experience should be attributed.

The demand for prescription drugs is mostly not limited by the income of the population, since these goods belong to the necessities of life. The demand for overthe-counter drugs (due to their lower need) is more susceptible to the influence of the population's income and is more elastic.

The objective factor limiting the demand for goods and services is the purchasing power of the population/

A special feature of the pharmaceutical market is that the demand for medicines is also met at the expense of the customer state budget. In this sector of the market there is "state demand", it is limited by "state purchasing power".

In addition to objective factors there are also subjective factors affecting the formation of demand. These include social and cultural norms and traditions, awareness, and past experience of consumers. Based on the fact that the demand for medicines is determined not only by consumers, but also by doctors, all these factors should be considered in relation to medical professionals.

In the case of prescription drugs, the level of awareness of doctors is the most important.

Medical demand has a number of distinctive characteristics.

A distinctive feature of the formation of demand for medicines is that there are a number of state restrictions on prescribing patients and the norms of one-time leave of certain medicines of certain pharmacological groups.

The financial limitations of the budget allocations, provided for the purchase of drugs of the LPU and the provision of medical care for certain groups of the

population and certain categories of patients during their treatment in outpatient conditions, have a significant impact on the demand for medicinal products.

The most general approach involves dividing all the factors that shape the demand for medicinal products:

- 1) medical (morbidity of the population, competence of medical personnel, application of modern diagnostic methods, choice of treatment tactics);
- 2) socio-economic (number of health centers, pharmacies, doctors, pharmacists, income level, demographic and physical health indicators, cultural level of the population, etc.);
- 3) natural and climatic.

It should be noted that, as a rule, the actions of the doctor, the pharmacist and the patient are included in the process of forming the demand for medicines.

#### PRACTICAL ASSIGNMENTS

*Task 1.* Depending on the type of demand, define and characterize different types of marketing. The results present in the tab. 3.1.

Tab 3.1 Types of marketing depending on the types of demand

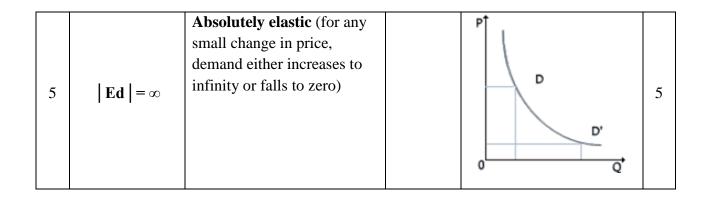
Type of demand	Type of marketing	Marketing tasks
1	2	3
Negative		
Hidden		
Declining		
Irregular		
Full		
Excessive		
Irrational		

*Task 2.* Make matching pairs: the type of price elasticity of demand according to the given graphs on *tab. 3.2*.

*Tab 3.2* 

### Types of price elasticity of demand

№	Coefficient of price elasticity of demand   Ed	Characteristics of demand	Complia nce number	Graphs of price elasticity of demand	№
1	2	3	4	5	6
1	Ed   > 1	Elastic demand  (when the price of goods increases, the demand for them decreases significantly)		D D' O	1
2	Ed   = 1	Unit elasticity  (when the price of goods increases, the demand for them decreases proportionally)		D Q	2
3	Ed   < 1	Inelastic demand (when the price of goods increases, the demand for them decreases slightly)		P D' D'	3
4	E= 0	Absolute inelastic demand (with any price change, the demand does not change, that is, the same quantity of goods is bought)		P D D'	4



**Task 3.** Analyze tab data. 3.3, which characterize different situations of the regional pharmaceutical market of *Cetirizine* 10 mg tablets No. 10. Construct a supply and demand curve (Fig. 3.6) according to tab. 3.3 and determine the value of the equilibrium price (Pe) and the corresponding sales volume (Qe) of tablets *Cetirizine* on the graph in this pharmaceutical market.

Tab 3.3

Source data of the regional pharmaceutical market

Cetirizine 10 mg tablets № 10

Price for 1 pack. (UAH)	Supply volume (100,000 units per year)	Demand volume (100,000 units per year)
8	1	7
16	3	6
24	5	5
32	7	4
40	9	3

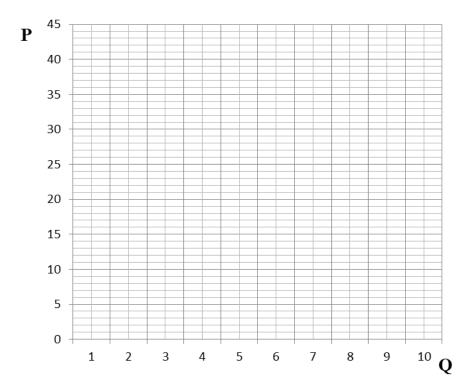


Fig. 3.6. Supply and demand curve for cetirizine 10 mg tablets № 10

*Task 4.* Describe the methods of studying and determining the demand for medicinal products. Present the results in *Tab. 3.4*.

Tab 3.4

#### Methods of studying demand

The method of studying demand	Characteristic
1	2
Normative method	
Method of expert	
evaluations	
Data extrapolation	
method	
Mathematical modeling	
Method of qualimetry	

## After completing the practical assignment, the student should acquire practical skills and abilities:

- to characterize different types of demand;
- to characterize different types of marketing depending on the type of demand;
- use coefficients of price elasticity to determine demand;
- calculate the value of the equilibrium price (Pe) and the corresponding volume of sales in accordance with the law of market equilibrium;
- apply various methods to determine and study the demand for medicinal products

#### **SELF-CHECK TESTS**

1

The amount of goods or services that producers are willing to sell at a certain price for a certain period is called:

- A. Demand
- B. Need
- C. Necessity
- **D.** Supply
- E. Product volume

2

The set of requirements for goods from consumers, which is supported by purchasing power, is called:

- A. Demand
- B. Supply
- C. Advertising
- D. Marketing
- E. Marketing

3

The marketing department of a pharmaceutical factory found that the demand for baby echinacea syrup fluctuates significantly with a small change in price. In this case, the demand is considered:

- A. Elastic
- B. Inelastic
- C. Absolutely elastic
- D. Absolutely inelastic
- E. Universal

4

To determine the degree of sensitivity of the demand for a drug to changes in the price or income of the consumer, such a concept as elasticity of demand is used. If there is no competition, the demand becomes:

- A. Ineastic
- B. Elastic
- C. Separately elastic
- D. Fully elastic
- E. Completely inelastic

5

With which type of demand will the horizontal linear form of demand be displayed on the graph?

- A. Absolutely elastic
- B. Demand is elastic
- C. Demand is inelastic
- D. Unitary

6

A marketer of a wholesale and retail pharmaceutical company needs to determine how the volume of demand will change when the price increases by 10%, if it is known that the elasticity coefficient is equal to 1.

- A. Decrease on 10%
- B. Increase on 10%
- C. Decrease on 1%
- D. Increase on 1%
- E. Will not change

7

The marketing department of the pharmaceutical company found that with a slight increase in the price of the drug, the demand for it decreased significantly. Determine the type of demand:

- A. Elastic
- B. Inelastic
- C. Rational
- D. Unitary
- E. Irrational

8

The marketing department of a chemical and pharmaceutical plant found that the demand for herbal cough medicine in the form of baby syrup fluctuates significantly throughout the year. In this case, the demand is considered:

- A. Irregular
- B. Inferior
- C. Incorrect
- D. Irrational
- E. Unrealized

9

When studying the demand for medicines and medical goods, several types are distinguished. What kind of demand corresponds to a situation when the desire of consumers cannot be satisfied with the help of goods and services available on the market?

- A. Hidden
- B. Negative
- C. Irregular
- D. Excessive
- E. Irrational

10

According to the law of demand, an increase in the price of a product on the market leads to:

- A. Increase in the offered quantity of goods
- B. Reduction of the offered quantity of goods
- C. It does not affect the offered quantity of goods in any way
- D. The offered quantity of the product remains unchanged

#### **TOPIC 4**

## INFORMATION MARKETING SYSTEMS. MARKETING RESEARCHES

**Students should know:** the essence of information and its types, the structure of information marketing systems (IMS), principles, algorithms and methods of conducting marketing researches (MRs), analysis of the results of MRs, features of consumer behavior research in the pharmaceutical market

**Basic terms and concepts**: information, "scientific" information, types of information, structure of information marketing systems, marketing research, consumer behavior on the pharmaceutical market

#### **QUESTIONS**

- 1. The essence of the concepts "information", "scientific information". The value of information in marketing theory.
- 2. Main types of information.
- 3. Marketing information system, its subsystems.
- 4. Marketing researches (concept, requirement, objects, organizational forms, algorithm).
- 5. Secondary information, its sources.
- 6. Primary information, methods of its collection.
- 7. Marketing information analysis system.
- 8. The method of drawing up a report on conducted marketing researches.
- 9. Peculiarities of consumer behavior researches in the pharmaceutical market.
- 10. Modeling the purchasing behavior of a consumer organization on the pharmaceutical market.

#### **SELF-CHECK QUESTIONS**

- 1. Define the terms "information", "scientific information".
- 2. The importance of information in the company's activities.
- 3. Classification of information (types).
- 4. Marketing information system and its components...
- 5. List the advantages and disadvantages of creating mass media.
- 6. The essence of marketing researches. Requirements.
- 7. Objects, organizational forms of marketing researches.
- 8. Stages of the marketing researches process.
- 9. Secondary information, its sources.
- 10. Advantages and disadvantages of secondary information.
- 11. Primary documentation and its collection algorithm. Positive qualities and disadvantages.

- 12. Methods of collecting primary information (observation, experiment, survey, simulation).
- 13. What does the marketing information analysis system include?
- 14. List the forms of providing primary marketing information.
- 15. List the economic and statistical methods in the system of marketing information and analysis.
- 16. The structure of the report on the results of marketing researches.
- 17. Consumer market and factors affecting consumer behavior.
- 18. Conceptual model of consumer behavior.
- 19. The process of prescribing prescription drugs to a consumer by a doctor.
- 20. The process of making a decision on the purchase of goods by an organization-consumer.
- 21. The decision-making process regarding the selection of drugs for purchase by health care institutions.

#### **OVERVIEW**

Using marketing, the manufacturer or wholesale and retail enterprise plans what to produce, where to distribute goods, what price to establish, etc.

For this purpose it is necessary to know the potential buyer, its opportunities, preference, and also to have data about presence of the similar goods on the market, about a demand condition for it, etc.

Such information receive by marketing research.

It is possible to name marketing research as the communicative channel by which connection with an environment is established.

**Information** is documented or announced information about processes and phenomena occurring in various spheres (nature, state, society, a certain environment).

"Informatio" - translated from Latin as "explanation, exposition".

*In a narrow sense, information* is information that is the object of storage and transformation (processing + transmission

The information received promptly helps:

- Monitor the external and internal environment of the pharmaceutical company;
- Increase the efficiency of activities;
- Get competitive advantages;
- Determine the attitude of consumers to products or organizations;
- Increase trust in the pharmaceutical company and reinforce intuition;
- Coordinate your strategy and reduce risks;
- Conduct performance evaluation.

According to the LAW OF UKRAINE " About Information" (Article 1):

*Information* - any information and/or data that can be stored on physical media or displayed in electronic form

Article 2. The basic principles of information relations are:

• guaranteed right to information,

- openness, availability of information and freedom of its exchange,
- freedom of expression of views and beliefs,
- reliability and completeness,
- legality receipt, use, distribution, storage and protection information.

The Ownership subjects are:

- physical persons,
- subjects of authority,
- legal entities,
- association of citizens.

Article 5 Right to information.

Ownership of information is the regulation by law of social relations regarding the possession, use and disposal of information.

The basis for the manifestation of ownership of information is:

- development of information on their own and at their own expense,
- contract for the development of information,
- a contract containing conditions for the transfer of ownership of information to another person.

The right to information is ensured:

- the duty of state authorities at all levels of management to inform about their activities and decision-making,
- organization of special information services that provide access to information,
- free access of subjects of information relations to statistical data, archives, library and museum funds,
  - development of a mechanism for exercising the right to information.

**Scientific information** - - information that is the result of scientific research as a process of learning about the objective laws of the development of nature, biology, medicine and society, and which is processed and summarized by the abstract and logical thinking of a person.

*Information activity* is a set of actions aimed at satisfying the information need.

The main types of information activities are receiving, using and distributing, and storing information

Obtaining information is the acquisition, accumulation, in accordance with the legislation of Ukraine, of documented or published information by legal entities or individuals.

The use of information is the satisfaction of information needs.

Dissemination of information - expansion of the implementation of documented or published information.

*Information storage is* ensuring the proper condition of information and its material carriers.

The main directions and methods of the state in the field of information policy are:

- Providing access to information;
- Organization of national systems and networks of information bodies;

- Strengthening the material, technical, financial, organizational, legal and scientific foundations of information activities;
  - Ensuring the efficiency of information use;
- Ensuring the openness and transparency of the activities of subjects of authority;
- Constant updating, enrichment and preservation of national information resources;
  - Protection of information.

#### **Types of information**

#### By content:

- information about a natural person,
- the information is for reference encyclopedic in nature,
- environmental information,
- information about the product (service, work),
- scientific and technical information,
- tax information,
- legal information,
- statistical information,
- sociological information,
- other types

By source of income:

- centralized,
- decentralized,
- mixed.

*By scope of coverage:* 

- full,
- partial,
- redundant.

According to the purpose:

- primary,
- secondary,
- internal,
- external.

By period of validity: one-time, periodic.

By the shape of the carrier: sound, visual (textual, artistic).

According to the level of reliability: reliable, unreliable.

*By industry purpose:* 

- Medical,
- Agricultural,
- Pharmaceutical,
- other branches of the national economy.

On the basis of access to information: open, with limited access (confidential, secret, official).

Depending on the semantic features and orientation: statistical information, sociological information, mass information.

The information represents a set of the ordered document files and information technologies which provide information processes on the basis of standardized forms of submission and data transmission, forms and methods of rendering of information services of different type.

Information is of great importance in conditions of the market – for the manufacturer, wholesale, retail trade. The information on the market, assortment of goods, demand, a market capacity, a share of the separate organizations, distribution channels, advertising uses the greatest demand. Sources of this information are questioning, exhibitions, seminars, fair brochures, price-lists, periodic or special editions, statistical collections, the thematic directories, the specialized databases. Except for the information on the market the information on the internal environment (scientifically – technical potential, the staff, industrial reserves and stocks, production costs, profit profitability of release of goods, pricing), as well as the information on the environment (demographic, economic, climatic, scientific-technical, political, cultural) is used.

### Marketing information is numbers, facts, information, rumors, estimates and other data necessary for analysis and forecasting of marketing activities

Possession of various information and its use in interests of the enterprise is the main strategic condition of marketing. Value in marketing management causes major principles of information formation:

*Urgency*, that is real timely display of the marketing environment condition (in the best commercial databases the information is updated daily);

Reliability – provides an exact reconstruction of a condition and development of manufacture, the market, an environment. In connection with necessity of preservation by the enterprise of competitive positions various sources of the information should be used, and the obtained data should be analyzed on absence of contradictions;

Relevance of data – information formation according to certain requirements;

Completeness of display – is necessary for the objective account of all factors forming or influencing of condition and development of the marketing environment;

Purposefulness of data – focuses on specific goals and tasks;

The coordination and information unity – require such system of indicators' working out which contradictions in conclusions would not be sup-posed, inconsistency of the primary and received data.

Consumers of pharmaceutical information on the market can be:

- specialists with medical or pharmaceutical education,
- scientists and other specialists,
- patients or their relatives,
- other people and organizations.

In this regard, in the pharmaceutical market, information is classified into *three main types:* 

- *scientific information about drugs* the flow of information necessary for effective therapy,
- *marketing information system* the flow of information necessary for the implementation of marketing activities,
- ullet logistics information system the flow of information necessary for logistics activities.

In the pharmaceutical market the information on achievements is necessary in the field of creation, release of new medicines, tactical demand, offers on separate pharmacological groups, the analysis of own activity, search of new commodity markets, estimation of competitive advantages.

The information on advertising, which promotes demand, is necessary for promotion, planning of the need for medicines, their rational use, introduction in medical practice.

Consumers of the pharmaceutical information are operators of the market, experts (doctors and pharmacists), consumers.

The following types of information are in great demand in market conditions:

- Opportunistic,
- Commercial,
- Social,
- Ecological.

Components of the marketing environment:

- market of goods and services,
- production of goods and services,
- external macro environment related to production and sales market.

By purpose, marketing information is divided into:

- Reference information,
- Recommendation information,
- Regulatory information,
- Signal information,
- Regulatory information.

The external source forms a documentary information flow (DIP), i.e. published and unpublished information. Conventionally, DIP is divided into 5 types:

- Scientific publications (medical magazines, collections materials congresses, abstracts of reports, monographs).
- Scientific and industrial (manuals, atlases, magazines for secondary medical personnel, others).
  - Educational (textbooks, manuals, books, brochures, etc.).
  - Popular scientific publications (magazines, books, brochures).
  - Publication of an organizational, economic and official nature.

**Information search** - a set of operations aimed at meeting information needs, identifying by specified characteristics all documents containing the necessary information, with subsequent issuance of original information documents, their copies or bibliographic descriptions, or issuance of certificates on this issue.

After selecting relevant information, it is necessary to conduct its analysis and synthesis, i.e. to carry out analytical and synthetic processing. The main types of analytical and synthetic processing of documents include:

- bibliographical description,
- annotation,
- referencing,
- compilation of various reviews,
- translation from one language to another.

Most often, after processing and analyzing secondary information, they proceed to the collection of primary data.

#### **Marketing Information Systems and Its Subsystems**

The set of information necessary for the implementation of marketing activities is usually called a marketing information system (MIS).

It is believed that "the recipe for a good decision is: 90% information + 10% inspiration", which is why many companies develop their marketing information systems.

**Marketing information system (MIS)** - it is a set (unified complex) of personnel, equipment, procedures and methods designed for the collection, processing, analysis and distribution at the appointed time of reliable information necessary for the preparation and making of marketing decisions.

It is a way of thinking through decisions to find marketing information necessary for managers

#### The reasons for the establishment of such systems are:

- gradual transition of local marketing to regional, national international,
- transition from consumer necessity to consumer needs,
- the emergence of non-price competition.

Improving the functioning of mass media gives companies a number of advantages:

- organized collection of information about the state of the micro- and macroenvironment,
  - broad overview,
  - storage of important information,
  - marketing plan coordination,
  - obtaining results about the state of the firm in quantitative terms indicators,
  - carrying out analysis expenses and profit.

No marketing activity can be carried out in isolation, it doesn't work in isolation that means there are various forces could be external or internal, controllable or uncontrollable which are working on it. Thus to know which forces are acting on it and its impact the marketer needs to gather the data through its own resources which in terms of marketing he is trying to gather the market information or form a marketing information system. This collection of information is a continuous process that gathers data from a variety of sources synthesizes it and sends it to those responsible for meeting the market places needs.

The effectiveness of marketing decision is proved if it has a strong information system offering the firm a Competitive advantage. Marketing Information should not be approached in an infrequent manner. If research is done this way, a firm could face these risks:

- 1. Opportunities may be missed.
- 2. There may be a lack of awareness of environmental changes and competitors' actions.
- 3. Data collection may be difficult to analyze over several time periods.
- 4. Marketing plans and decisions may not be properly reviewed.
- 5. Data collection may be disjointed.
- 6. Previous studies may not be stored in an easy to use format.
- 7. Time lags may result if a new study is required.
- 8. Actions may be reactionary rather than anticipatory.

The total information needs of the marketing department can be specified and satisfied via a marketing intelligence network, which contains three components:

- 1. Continuous monitoring is the procedure by which the changing environment is regularly viewed.
- 2. Marketing research is used to obtain information on particular marketing issues.
- 3. Data warehousing involves the retention of all types of relevant company records, as well as the information collected through continuous monitoring and marketing research that is kept by the organization.

Depending on a firm's resources and the complexity of its needs, a marketing intelligence network may or may not be fully computerized. The ingredients for a good MIS are consistency, completeness, and orderliness. Marketing plans should be implemented on the basis of information obtained from the intelligence network.

An Marketing Information System offers many advantages:

- 1. Organized data collection.
- 2. A broad perspective.
- 3. The storage of important data.
- 4. An avoidance of crises.
- 5. Coordinated marketing plans.
- 6. Speed in obtaining sufficient information to make decisions.
- 7. Data amassed and kept over several time periods.
- 8. The ability to do a cost-benefit analysis.

The disadvantages of a Marketing information system are high initial time and labour costs and the complexity of setting up an information system. Marketers often complain that they lack enough marketing information or the right kind, or have too much of the wrong kind. The solution is an effective marketing information system.

The marketing information system most often represents 4 auxiliary subsystems:

• Current marketing information collection subsystem (marketing intelligence) this is a constant activity to collect current information about changes

in the external marketing environment, necessary for both the development and correction of marketing plans.

- **Subsystem of marketing research.** It is a purposeful collection, processing and analysis of information in order to reduce uncertainty when making management decisions.
- *Internal reporting subsystem*. This subsystem displays indicators of the current volume of sales, sums of expenses, material stocks, cash flow, receivables and payables.
- *Marketing information analysis subsystem*. This is a set of procedures and logical algorithms, in which, with the help of certain information created on the basis of a marketing database, access to the information necessary for managers to make decisions is carried out, and its analysis is carried out in a given direction.

By results of marketing research it is possible to estimate market volume, to define a segment of potential consumers and on the basis of this information to establish the purposes for expansion or enterprise reduction, to generate the sale plan.

The system of the marketing information analysis contains of economic indicators analysis, and also short-term and long-term forecasting on the basis of the analysis of tendencies.

Marketing research and the analysis are based on application of different economic and mathematical methods: multidimensional, regression and correlation, imitating modeling, the statistical theory of decision-making.

The system of marketing information analysis by using of economic-mathematical methods gives the chance to define:

- influence of major factors on distribution (sale volume) and value of each of them;
- opportunity of distribution at a rise prices or publicity expenses in the corresponding volume;
  - parameters of production competitiveness;
  - an estimation of market activity of the enterprise, etc.

The obtained data are transferred by a firm management for necessary decisions making.

## Marketing researches (concepts, requirements, objects, organizational forms, classification, algorithm)

Using marketing, the manufacturer or wholesale and retail enterprise plans what to produce, where to distribute goods, what price to establish, etc. For this purpose it is necessary to know the potential buyer, its opportunities, preference, and also to have data about presence of the similar goods on the market, about a demand condition for it, etc. Such information receive by marketing research.

It is possible to name marketing research as the communicative channel by which connection with an environment is established.

Marketing researches (MR) is a systematic determination of the range of necessary data, their collection, analysis and reporting on the results to solve the tasks.

MRs are the purposeful collection, processing and analysis of information in order to reduce uncertainty when making management decisions.

*Marketing research (MR):* 

- In America, it's business,
- In Germany, it's science,
- In the Great Britain, it's an industry,
- In Ukraine, this is creativity.

Marketing research are function which connects the organisation with consumers through the information. The received information is used for revealing and definition of possibilities and problems of marketing; workings out, specifications, an estimation and the control of execution of marketing actions; perfection of understanding of marketing as process.

Marketing research are the scientific researches directed on regular gathering, reflexion and the analysis of the information concerning needs, opinions, motivations, relations, behaviour of separate persons and the organizations (subjects of economic activities, official bodies, etc.) for the purpose of proved marketing decisions' acceptance.

Marketing research are spent in three directions: research of macro-and a microenvironment and the internal environment of the enterprise.

The ultimate goal of MRs is formation of the optimal strategy and tactics of actions taking into account the actually formed and likely in the future complex of market conditions and factors, as well as the opportunities and potential of the enterprise

The main objects of the MRs are market trends, assortment of goods, competitive prices, consumer preferences, conditions of suppliers, promotion of goods, etc.

They enable the company to solve the following issues:

- Obtaining a competitive advantage,
- Reduction of financial risk,
- Studying the attitude of consumers to goods,
- Confirmation of intuition,
- Improvement of work efficiency,
- Strategy coordination,
- Getting support in decisions,
- Activity evaluations, etc.

The following requirements are made for marketing researches:

- Systematicity,
- Completeness,
- Economy and efficiency,
- Efficiency , flexibility and perspective,
- Scientific approach,
- Regularity.

Organizational forms of marketing research can be:

- Marketing research firm,
- Research economic institutes,
- Advertising agencies,
- Industrial and commercial communities, national professional association,
- of Commerce and Industry and its regional departments,
- Consultants on issues market research,
- Informational brokers.

Informants (can be):

- Consumers,
- Experts,
- Specialists.

Performers (may speak)

• specialists of various scientific disciplines: pharmacy and medicine, sociology, psychology, anthropology, ecology, aesthetics, design, history, philosophy, etc.

To provide managers with the latest information, large firms take a number additional measures:

- incentivize their sellers (if they report on events),
- encourage distributors for information about competitors (purchase of goods, visits to exhibitions, "open days", meetings of shareholders, conversations with employees of competing companies, etc.),
  - purchasing information from third-party information providers,
- acquisition of information files in departments for collection and distribution of current information.

The executor (specialist) is obliged to:

- Do not disclose the intentions of the customer (firms, pharmacies),
- Be objective, take all precautions so as not to influence the interpretation of recorded facts.
  - Specify the degree of error of your data,
  - Do research constantly so as not to miss changes,
  - Demonstrate a creative approach to new areas of search, use modern methods. At the same time, a marketing research specialist does not have the right to:
    - Exaggerate your capabilities and mislead the customer,
  - Transfer the results of the research to other companies, organizations, if this is not agreed in advance.

Cannot make any significant changes to the conditions of conducting marketing research without the consent of the customer.

Studying of macroenvironment factors, their tendencies and influence on enterprise activity allow to define its strategy, to allocate perspective directions for work on the market.

Marketing research of a microenvironment study the market, competitors, consumers, goods, prices, distribution systems.

Concrete result of marketing research take place at a choice of strategy and tactics of enterprise's marketing activity.

*Problems encountered at the stage of research preparation:* 

About whom? or About what? (object of research).

What? (we want to know).

For what? (use of results).

When? (get results).

How much does it cost? (costs).

How profitable? (work efficiency).

In what way? (technology of obtaining and form of presentation of results).

Market research is the most widespread direction in marketing research. Objects of market research are tendencies and processes on the market which include the economic changes analysis, scientific and technical, demographic, ecological, legislative and other factors. The structure and market geography, its capacity, dynamics of sale, a competition condition, market conjecture, opportunities and risks are investigated also.

The basic results of market research are forecasts of its development, an estimation of conjecture tendencies, definition of key success factors. The market segmentation, choice of the target markets and market niches is carried out.

Research of consumers allows to define factors of consumers choice of goods (incomes, a social status, an age, sex, education). The consumption structure, goods security, consumer demand tendencies are investigated.

Research of competitors consists in reception of necessary data for maintenance of competitive advantages on the market and also to find cooperation possibilities. For with purpose are analyzed strength and weak-nesses of competitors, their market share, work with goods, changes of prices, advertising campaigns. The material, financial, labour potential of competitors, the organisation of management are studied. The choice of ways and possibilities of achievement of the most convenient position in the market concerning competitors becomes result of such research.

Studying of firm structure of the market is carried out for the pur-pose of reception of the information on possible intermediaries, and also transport and forwarding, advertising, insurance, legal, financial, consulting and other companies and organisations creating a marketing infrastructure of the market.

Overall objective of goods research is determine of conformity of technical and economic indicators and quality of goods which are present on the market, to requirements of buyers, and also their competitiveness analysis.

Classification of market researches:

- The subject of the event,
- The purpose of the study,
- Research direction,
- Frequency of conducting,
- Subject of research,
- Duration of the study,
- Conducting technology,
- Conducting method.

Type of research:

For the purposes of conducting:

- aimed at solving existing problems,
- issues of forecasting, planning, and analysis of current activities.

By the subject of the event:

- are conducted by the marketing service of the pharmaceutical enterprise,
- are carried out by special marketing organizations.

*By direction of conduct:* 

- -market research,
- -consumer behavior research,
- drug research,
- study of environmental factors.

According to the periodicity of the: disposable, repeated, reusable.

*By subject of research:* 

- Advertising research,
- Price research.
- Distribution channel research,
- Study of the company's activities,
- Competitor research,
- Market opportunity research,
- Research of market parts.

By the time of the study:

- up to 1 week,
- from 1 week to a month,
- 1-2 months.
- 2-6 months.
- more than 6 months.

By type of research:

- Search,
- Experimental,
- Descriptive.

According to the methods of conducting

- 1. Using methodological techniques:
  - general scientific,
  - analytical,
  - sociological,
  - psychological,
  - designer,
  - ecological.
- 2. According to the nature of the event:
  - qualitive,
  - quantitative.
- 3. According to the method of conducting:
  - are carried out only by a person, without the use of technical means,
  - only with the use of special devices,
  - using specific technical means.
- 4. By stages of implementation:

- data collection methods,
- methods of analysis of the obtained results.

According to the technology of conducting

- development of data collection tools,
- development of measurement methods,
- sample organization,
- forecasting methods.

Results of research give the chance to the enterprise to develop own assortment of goods according to consumers needs, to raise their competitiveness, to define directions of activity depending on different stages of product life cycle, to find idea and to develop new goods, to improve mark-ing, to develop a corporate style, to define patent protection means.

Price research is directed on definition of such level and a parity of the prices which give the maximum profit with minimum expenses. As a result of the spent research optimum parities "expense-price" and "price-profit" are selected.

Research of distribution and sales provides determining of the most effective ways and means of the fastest selling of goods to the consumer. Research include the analysis of functions and features of wholesalers and retailers activity, their relationship with manufacturers.

Studying of intermediaries provides the analysis of market coverage, trading intermediary's potential, its reputation, distribution network, financial stability, etc.

Such data allow to define possibilities of increase in goods turnover, to optimise commodity stocks, to develop criteria of a of effective distribution channels choice and techniques of sale to end users.

At studying of suppliers of raw materials, stocks, the equipment, and also finished goods (for trading organisations) the analysis of offered production quality, the prices for it, conditions of deliveries, condition of supply, possibility of crediting, possible volumes of deliveries, reputation of the supplier are carried out.

Research of marketing communications system allows to develop a public relations policy and to create the favourable relation to the enterprise, its goods; to define methods of consumer demand formation, influence on suppliers and intermediaries; to raise efficiency of communicative connections, including advertising.

Research of the internal environment of the enterprise has an object to define real competitiveness level of the enterprise as a result of comparison of corresponding factors of the external and internal environment. Manufacture, sale, management, marketing, the finance are analyzed.

It is important, that enterprise activity has been completely adapted to environment, what is why are allocated strength and weaknesses of the enterprise, opportunity and threat. This information is used for strategic and tactical decision making on a complex of marketing in a company

Usually, marketing researches are conducted by two methods:

- by the method of expert evaluations,
- by the method of sociological research.

Marketing research usually are directed on studying of research object which represents a social reality or social process, and also they are concrete people, documents, etc., acting as observation unit and the analysis. Object of research are the most significant sides of object which are subject to direct studying in applied research. Applied research are directed on studying of social factors: behaviour of individuals, social groups, collectives; products of human activity – goods and services; judgments, opinions, sights of people. A subject of marketing research of theoretical (fundamental) character are the various markets, types of consumers, their motivations, etc.

In marketing research process the basic stages are allocated.

- 1. Working out of the concept or the research program:
  - problem statement;
  - definition of the purpose and problems;
  - object and subject of research definition;
  - definition of indicators system;
  - formation of a working hypothesis.
- 2. Gathering and the analysis of primary data:
  - working out of the working tool;
  - data acquisition process;
  - processing and the analysis of data.
- 3. A formulation of conclusions and registration of research results:
  - working out of conclusions and recommendations;
  - registration and presentation of results of research.

In other words, *Marketing researches process (stages)* 

- 1. Definition of the problem and objectives of the research,
- 2. Selection of sources of information. Collection of secondary information and its analysis ("office" studies),
- 3. Collection and analysis of primary information,
- 4. Recommendations and use of results (compilation of a report).

The first stage. Definition of the problem and objectives of the research.

The algorithm of this study includes research program and its elements, goals and objectives, working hypothesis, and the definition of the system of indicators.

Goals are divided into three types:

- searching
  - preliminary data collection that sheds light on the problem and our working hypothesis;
- descriptive
  - description of certain phenomena;
- experimental
  - testing our working hypothesis about some causal relationship.

*II stage*. Selection of sources of information. Collection of secondary information and its analysis ("office" research) In the process of marketing research, necessary data may appear:

- · Secondary,
- Secondary + primary,

• Primary.

Most often is used secondary information, regardless from whether enough it to obtain the final ones results research (method of " office " research).

Potential Sources of Information:

- Primary data,
- Secondary data: internal and external.

Scheme of data transformation into information: Data-Processing-Interpretation-Information.

# Secondary information.

- Advantages:
  - · accessibility,
  - promptness of receipt,
  - low price,
  - certainty,
  - availability of several sources of information.
- Disadvantages:
  - unreliable,
  - out of date,
  - incomplete,
  - contradictory,
  - does not reflect the research methodology.

Requirements for secondary information:

*Relevance* – compliance with research objectives.

Certainty - information is properly collected and processed.

*Topicality* - the information is up-to-date enough to make a management decision.

*Objectivity* - the principle of impartiality was observed during the collection and processing of information.

Stage III. Collection and analysis of primary data.

The advantages include:

- he collection methodology is known and controlled by the firm,
- the purpose of collection is clearly defined,
- results available to the firm and limited to competitors,
- information "is not out of date".

The disadvantages include:

- a large expenditure of time and money,
- not all information can be obtained in this way,
- in case of insufficient level of qualification of the marketing researcher, the information may be inaccurate.

Stages of collecting primary information:

- AND Determination of the research method,
- II Formation of the sample,
- III Selection of research tools.

Stage IV. A means of communication with the audience.

Primary information is information that is first collected for any specific purpose.

There are 4 ways methods to collecting primary information: observation, experiment, survey, imitation.

**Observation** is a method of collecting information by recording the functioning of the objects under study without the researchers establishing contacts with them and the lack of control over the factors affecting their behavior.

The advantages include simplicity and relative cheapness, exclusion of distortions caused by contact of objects with the researcher.

The disadvantages include does not allow to unambiguously establish the internal motives of the objects' behavior and decision-making processes, may be misinterpreted by observers.

Imitation is a mathematical, graphical or other model of controlled and uncontrolled factors that determine the strategy and tactics of the enterprise.

The advantages include

• consists in the ability to quickly analyze many options for marketing actions and choose the best one on this basis.

The disadvantages include

• consist in the complexity and laboriousness of creating a model, which requires in-depth study and formalization of cause-and-effect relationships between marketing factors, its external environment and factors that determine purchasing behavior.

**Experiment** - a method of collecting information about the behavior of the objects being studied, which involves establishing control over all factors affecting the functioning of these objects.

*Survey* - it is a method of gathering information by establishing contacts with research objects.

Classification of the "survey" method:

- According to the source of information:
  - Mass,
  - Specialized.
- According to the frequency of polls:
  - Disposable,
  - Repeated.
- By degree of coverage:
  - All encompassing,
  - Selective.
- According to the survey form:
  - Questionnaire,
  - Interviewing.

The advantages include

• Questionnaire consists of a practically unlimited field of its possible application, which allows to obtain information about the current behavior of the object, its behavior in the past and intentions in the future.

The disadvantages include

• surveying involves a large amount of labor, significant costs for conducting surveys, a possible decrease in the accuracy of the information obtained due to incorrect or distorted answers

Questionnaire (questionnaire)

It is a system of questions aimed at identifying the characteristics of the object or subject of research.

It should consist of the following parts:

- Introductory,
- Contact,
- Control room,
- Final.

**Digitization** - a general term for the digital transformation of society and the economy. It describes the transition from the industrial age and analog technology to the age of knowledge and creativity, characterized by digital technology and innovation in digital business.

*Types of questionnaires:* 

- **CAPI** (Computer Assisted Personal Interviewing) the interviewer personally asks questions and answers and records the electronic questionnaire on laptops, smartphones or tablets.
- **CATI** (Computer Assisted Telephone Interviewing) the interviewer asks questions over the phone and records the answers in an electronic questionnaire.
- **CAWI** (Computer Assisted Web Interviewing ) is a questionnaire technique using the Internet. The respondent fills out the electronic questionnaire without the help of an interviewer. The questionnaire can be sent by e-mail or posted on the website.

In the future, online in-depth interviews and online methods in general will gain even more popularity:

- Online research with pre-recruiting;
- Recruiting is a set of actions for the selection of respondents in accordance with the enrollment of certain socio-demographic characteristics and their characteristics by a special audience with subsequent signing for participation in sociological research

When compiling a sample, you need to answer three questions:

- Who should be surveyed (ie, determine the sampling unit)?
- How many respondents should be interviewed (or what is the sample size)?
- By what criterion should people be included in the sample (or what is the structure of the sample)?

Conducting marketing researches and analysis are based on the application of various economic and mathematical methods, among which the following should be highlighted:

- multidimensional methods;
- regression and correlation methods;
- simulation methods:
- methods of statistical theory of decision-making.

# Methodology for compiling a report

In global practice, the following structure of the report based on the results of marketing research is adopted:

- 1. Title page:
  - the name of the document (the purpose and direction of the conducted research should follow from the name of the report);
  - name of the organization / name of the customer;
  - name of the organization / name of the person-executive.
- 2. Contents.
- 3. Introduction.
- 4. Research goals.
- 5. Methodology:
  - a) general formulation of the problem,
  - b) methods of information collection,
  - c) sample formation methods,
  - d) field work,
  - e) analysis and interpretation.
- 6. Limitations and Tolerances.
- 7. Results.
- 8. Conclusion and Recommendations.
- 9. Addition:
  - a) copies of questionnaires,
  - b) examples and details,
  - c) tables,
  - d) bibliography.

Various tables, charts, histograms, dendrograms, graphs are used in the report to improve the perception of the received information.

Sources of errors in conducting research can be:

- 1. Wrong choice of mathematical method of analysis (Methods of Mathematical Statistics, Technical and Economic Analysis, Operations Research);
- 2. Distortion of information during its transmission (Different interpretation of concepts);
- 3. *Subjectivity of respondents' answers* (respond not to what actually exists, but to what is expected of them);
- 4. Respondents with a certain typical nature of answers;
- 5. Incorrect or biased formulation of questions and compilation of questionnaires;
- 6. Differences in the quality of answers for different categories of respondents;
- 7. Biased or distorted sampling of respondents;
- 8. Different degrees of conscientiousness and objectivity of researchers and respondents
- 9. Lack of time for research.

#### PRACTICAL ASSIGNMENTS

*Task 1.* Display in tab. 4.1. classification of various types of information depending on the criterion.

 $tab\ 4.1$  Classification of various types of information depending on the criterion

Classification criteria	Types of information	
1	2	

- **Task 2.** Present the structure of the marketing information system in the form of a diagram.
- Task 3. Create an algorithm for the process of collecting primary information.
- *Task 4.* Schematically present the signs of marketing research classification and the subject of their content.

After completing the practical assignment, the student should acquire practical skills and abilities:

- to determine different types of information depending on the criterion;
- characterize the structure of the marketing information system;
- to determine the algorithm of the primary information collection process;
- to determine a rational method of marketing research.

#### **SELF-CHECK TESTS**

1

For effective marketing management, a number of principles of information formation should be followed. Indicate which principle corresponds to the definition of 'formation of information in accordance with certain requirements'

- A. Data relevance
- B. Certainty
- C. Information unity
- D. Data targeting

2

For effective management of pharm. company manager needs constant information. Specify general information requirements?

- A. It should be complete, optimal, timely, reliable and credible
- B. Redundant, detailed, securely protected, contains information that is important to the manager
- C. It must ensure company secrecy
- D. These requirements depend on the provider and recipient of the information
- E. There is no correct answer.

3

In order to promptly respond to changes in the market situation, a pharmaceutical company needs to have complete information. What type of information is in the greatest demand in a market economy?

- A. Commercial information
- B. Social information
- C. Environmental information
- D. Foreign economic information

4

To study the market of consumers of antihistamine drugs, the company decided to conduct marketing research. Indicate which stage of research is the priority:

- A. Defining the problem and forming research goals
- B. Collection and analysis of secondary information
- C. Development of a plan for collecting primary information
- D. Collection and analysis of primary information
- E. Making a report

5

The pharmacist of the pharmaceutical company received the task of conducting marketing research of the regional market of cardiovascular drugs. What studies should be conducted at the initial stage?

- A. Collection and analysis of secondary information
- B. Development of the questionnaire
- C. Calculation of the sample size
- D. Collection and analysis of primary information
- E. Preparation of the report

6

When conducting what type of marketing researches, official sources of information are mainly used: company reports, directories, data from trade and medical statistics?

- A. Office researches
- B. Field research
- C. Poll

- D. Observation
- E. Experiment

7

One of the stages of conducting marketing researches is the collection of primary information. Which of the methods of its collection involves clarifying the positions of people and their views on the problem based on their answers to previously prepared questions?

- A. Poll
- B. Observation
- C. Experiment
- D. Imitation
- E. Modeling

8

A marketer of a pharmaceutical company, conducting marketing research on the market of vitamin preparations according to parameters that include therapeutic efficacy, demand and supply, uses the following method:

- A. The method of expert evaluations
- B. Method of mathematical statistics
- C. Graphical method
- D. Method of copying primary medical documentation

9

In pharmacies of the "Svitanok" network, the display of medicinal products in showcases and shelves has been changed in order to study the impact of merchandising measures on changes in the sales volume of medicinal products. What method of marketing researches was used?

- A. Experiment
- B. Panel
- C. Poll
- D. Observation

**10** 

The marketing department of the pharmaceutical company conducted a study of the market situation of neuroprotectors. What component of the marketing information system does this activity correspond to?

- A. Systems of marketing researches
- B. System of collection of external current information
- C. Internal reporting system
- D. Analytical system of marketing
- E. Marketing management system

### **TOPIC 5**

# PRODUCT IN THE MARKETING SYSTEM. PRODUCT POLICY OF PHARMACEUTICAL ENTERPRISES

**Students should know:** the concept of the product, its consumer properties; assortment and nomenclature of medicines, product policy of pharmaceutical enterprises and its elements

**Basic terms and concepts**: product, consumer properties of the product, assortment, nomenclature, product life cycle, product policy, product innovations, process innovations, elements of the company's product policy

# **QUESTIONS**

- 1. Pharmaceutical products as a commodity, its consumer value.
- 2. Features of the medicinal product as a product.
- 3. Classification of the pharmaceutical product.
- 4. Assortment of pharmaceutical products, its characteristics.
- 5. Product policy of pharmaceutical enterprises, its directions.
- 6. Innovative activity of pharmaceutical enterprises.
- 7. Development of new medicines, its main stages.
- 8. Product life cycle.
- 9. Elements of the commodity policy of medicinal products.

# SELF-CHECK QUESTIONS

- 1. Product definition. Pharmaceutical products as a commodity.
- 2. Consumer value of the pharmaceutical product.
- 3. Features of the medicinal product as a product.
- 4. Classification of pharmaceutical products:
  - 4. 1. Principles of drug classification;
  - 4. 2. Principles of classification of medical products.
- 5. Product assortment and nomenclature of the product assortment.
- 6. Characteristics of the product range (width, saturation, depth, harmony).
- 7. The main directions of development of the product policy of the pharmaceutical enterprise (expansion of the assortment; renewal of the assortment; modification; diversification; modernization, etc.).
- 8. Innovations in pharmacy:
  - 8.1. Product innovations (creation and release of original drugs; development and release of generic drugs; creation of new forms of drugs; improvement of the quality of released drugs; finding new areas of application of existing drugs);

- 8.2. Process innovations (technological; organizational and managerial; social; informational).
- 9. Characteristics of the stages of development of a new medicinal product.
- 10. Concept of the life cycle of the product, characteristics of its main stages (introduction to the market, growth; maturity; decline; exit from the market).
- 11. Elements of the product policy of the enterprise:
  - 11.1.Trademarks and signs (manufacturers' brands, dealers' brands, franchising, brands);
  - 11.2.Brand usage strategies;
  - 11.3. Product packaging, its types and their functions;
  - 11.4. Marking information on the packaging of the medicinal product;
  - 11.5. System of bar coding of goods.

#### **OVERVIEW**

The generally accepted definition of a commodity - "the product of labor produced for sale" - remains valid in marketing. But all marketing manuals emphasize not only the role of the product in its exchange for money, but the ability to use it, to consume it:

"A commodity is a means by which a certain need can be satisfied" (Kotler).

According to international terminology, a commodity is everything that can be offered on the market for purchase, use or consumption in order to meet the needs of buyers.

Thus, a PRODUCT or PRODUCT in marketing is a product or service offered to a target market.

This definition hides a set of goods and services, their quality, quantity, design, and other characteristics that attract the attention of consumers of the target market.

The marketing service should monitor and make timely adjustments to the product policy: determine the main products of the company at the moment, their competitiveness, the life cycle of goods, in which markets it is necessary and possible to introduce new products, etc.

These can be physical objects, services, persons, organizations and ideas, as well as medicines, which differ from other types of goods in that:

- 1. They have a pharmacological effect on the body and are intended for the treatment of various diseases.
- 2. They are used in certain doses.
- 3. They have contraindications and side effects.
- 4. Certain medicines are registered and a doctor's prescription is required to purchase them.
- 5. It is a science- and capital-intensive commodity.
- 6. The creation, production, control, and sale of medicines are controlled by the state.
- 7. A license is required for the production and sale of medicines.
- 8. Medicines can only be purchased in pharmacies.

- 9. Specialists who have a certain level of education have the right to sell medicines.
- 10. A number of market categories such as the study and formation of demand, promotion, sales, advertising, etc. Medicines have peculiarities.
- 11. The range of medicines is wide.
- 12. The consumption of drugs is influenced by several factors: morbidity, number of medical institutions, number of doctors, seasonality, etc.

The product has consumer value.

The consumer value of a product is a set of consumer properties of a product. The following consumer properties of the product can be distinguished:

- quality, including reliability, shelf life, design;
- compliance with the functional purpose;
- correspondence of price, quality and consumer value;
- availability of documentation accompanying the goods;
- quality of post-sales service;
- variety of assortment, the ability to choose.

Understanding trends and characterizing the formation of consumer assessment of a product is an extremely important task for a marketer. It is he who needs to find and implement elements in the product that can attract a buyer.

In marketing, these elements are referred to as "key drivers of market success." Key factors of market success include:

- individualization of goods, i.e. production aimed at small groups of fairly homogeneous consumers;
- "critical mass of goods", the necessary set of technical innovations, with which the consumer associates the idea of a high-quality and progressive product;
- multifunctionality of the product the nature of this factor stems from the consumer's needs to satisfy certain of his needs not with the help of a group of goods, but with one and to do it as cheaply as possible;
- technical package a certain set of additional goods and services that allows the consumer:
- a) use the purchased goods with maximum convenience under any conditions;
- b) convenient storage of goods;
- c) use the product in conjunction with other goods to perform common functions.

Analyzing the relationship in the "buyer-product" system, it is necessary to pay attention to such characteristics of the pharmaceutical product as:

- a. Compatibility indicates the degree of compliance of the product with the needs of the buyer;
- b. perception characterizes the effect of the influence of the product on the buyer during preliminary observation before making a purchase;
- c. speed due to the fact that the buyer is focused on the instant effect, Lek K.S. The remedy must realize this desire as soon as possible;
- d. Symbolism characterizes the attitude of the buyer to a particular brand.

All the considered characteristics of the drug as a commodity must be taken into account when making tactical marketing decisions. It is equally important to know and take into account the classification of pharmaceutical products.

### Classification of pharmaceutical product

In marketing, products are traditionally divided into two large groups:

- 1. consumer goods or consumer goods (FMCG);
- 2. industrial goods (PA).

Personal goods (consumer goods) can be divided into three groups:

- <u>durable products</u> (expensive and relatively rarely bought);
- <u>short-term products</u> (purchased repeatedly, consumed immediately or a small number of times (food, cosmetics, etc., including medicines);
- <u>services</u> (actions that result in a product or other beneficial effect (a drug made in a pharmacy by an individual prescription).

A service is an object of sale, the usefulness of which is manifested in the form of certain actions, advantages or satisfaction of requirements.

### Distinctive characteristics of the service:

- Intangibility
- Inconsistency in quality
- Inseparability from the source
- Unpreservability

In turn, the products of this group are also classified according to different characteristics.

- Everyday goods are goods that are bought frequently, without much thought and with minimal effort to compare them with each other. These are, in particular, bread, soap, sweets, etc. In turn, everyday goods are divided into goods of basic constant demand and for emergencies.
- *Pre-selected products are* goods that the buyer carefully selects, compares with each other in terms of quality, price, external design, etc. These include, in particular, clothes, shoes, utensils. There are *similar and different products*.
- Goods of special demand are goods that have unique characteristics and for their purchase a significant part of buyers are ready to make additional efforts (household appliances)
- Passive demand goods are goods about which the buyer knows nothing, and if he knows something, then, as usual, he does not think about buying them. These are, for example, insurance services, the implementation of which requires significant efforts on the part of sellers. Principal product novelties are in a state of passive demand until intensive advertising acquaints consumers with the benefits of their use.

The first and most important component of the pharmaceutical market complex, which the company develops for its target consumers, is **pharmaceutical products.** It is divided into two large groups:

- Medicines and
- Medical Products

### Classifications of medicinal products and medical devices

A medicinal product is any substance or combination of substances (one or more APhIs and excipients) that has properties and is intended for the treatment or prevention of diseases in humans, as well as which can be prescribed to prevent pregnancy, restore, correct or alter physiological functions in humans by exercising a pharmacological, immunological or metabolic action or for establishing a medical diagnosis (APhI is an active pharmaceutical ingredient (drug substance, active substance, substance).

*Medical devices are* medical devices, materials and medical devices intended for diagnosis, treatment, prevention of the human body and / or ensuring these processes.

As for the classification of medicines, the Lists of drugs in force in Ukraine are based on the Anatomical and Therapeutic Chemical Classification (ATC classification).

ATC classification is based on the system of dividing drugs into groups depending on their effect on a certain anatomical organ or system in accordance with therapeutic indicators and chemical characteristics of the drug.

The peculiarity is that each dosage form has only 1 ATC code. In accordance with this system, medicinal products are divided into groups having 5 different levels.

In addition, medicines are also classified by:

- toxicological groups (toxic substances, potent substances, substances of the general list);
- anatomical and nosological principle (drugs that act on the musculoskeletal system, cardiovascular system, for the treatment of infections, etc.);
  - therapeutic use (analgesics, antibiotics, antihypertensives, etc.)
  - pharmacological action (anticoagulants, diuretics, vasodilators, etc.);
  - chemical structure (alkaloids, cardiac glycosides, steroids, etc.)
- *types of control and circulation* ( narcotic drugs, psychotropic substances and precursors)
- rules of prescription and dispensing procedure (drugs that are dispensed by prescription and drugs that are allowed to be dispensed without a prescription);
  - method of use (external, internal);
- physicochemical properties and influence of various environmental factors (photosensitive, thermolabile, odorous, dyes, etc.)
- state of aggregation (drugs in the mass of "Angro" solid, liquid, soft, gaseous);
- type of dosage form (solutions, suspensions, emulsions, drops, powders, tablets, dragees, granules, ointments, pastes, liniments, suppositories, etc.)
- finished medicinal products (factory and pharmacy) and individually manufactured medicines;
- *shelf life* with a short shelf life (up to two years) and a long shelf life (more than two years);
  - dosed and non-dosed medicines, etc..

The most relevant of them are the classification by:

- materials from which they are made (rubber products, plastic products, glass, etc.);
- assortment groups (dressings), sanitation and hygiene items, perfumes and cosmetics, etc.).
- functional purpose (patient care items, tools, devices, apparatus and equipment).

The specifics of each classification group should be taken into account when determining the strategy and tactics of marketing.

It should be noted that medicines and services for the manufacture of medicines in pharmacies are characterized by an important feature for the manufacturer: the buyer is once satisfied with the quality of drugs and services, then prefers drugs of the same company and orders medicines for production in the same pharmacy, that is, the *phenomenon of attachment to the brand (pharmacy) (included in the concept of customer loyalty)* arises quickly and requires relatively little effort to maintain it.

#### Assortment of pharmaceutical products, its characteristics

In the conditions of saturation of the pharmaceutical market, increased competition of pharmaceuticals, the company must work on updating the assortment and introducing new products to the market.

The assortment policy establishes a link between the requirements of the market, on the one hand, and the intentions and capabilities of the enterprise, on the other.

The task of the assortment policy is to ensure that at any given moment (and in a reasonable perspective) the set of goods produced or sold by the enterprise must optimally meet the requirements of consumers, both in terms of quality characteristics and in quantitative volumes. This is the main goal of the assortment policy.

Most companies are constantly introducing new drugs and abandoning old ones to ensure product replacement,

Thus, they develop the range of products, that is, the entire set of goods and services offered for sale.

The nomenclature of goods differs in the width of coverage (the number of different categories of goods) and capacity (the number of products in each category).

Large groups of products within this nomenclature are called *an assortment* of goods, which consists of categories of goods related in terms of their use or consumer characteristics.

Thus, *a product range* is a group of products that are interconnected either by functionality, or by selling them to the same groups of consumers or by channels and methods of promotion to the market.

Assortment group is a set of assortment items of a drug or medical device of a certain functional purpose

The range of products is characterized by the following indicators:

- width\_(determines the number of proposed assortment groups (for drugs - this is the number of pharmacotherapeutic groups.

The width of the product range is partly determined by the goals that the company sets for itself. Firms that are trying to gain fame as suppliers of an exhaustive assortment or seek to gain a large market share or expand it, usually have a wide range of products. Firms interested in high profitability usually have a narrowed range of profitable products.

- *depth* (displays the number of items in each assortment group)
- saturation (determined by the total number of drugs offered)

Due to the saturation of the product range, it can be expanded. There are several reasons why they resort to saturation with assortment:

- 1. The desire to receive additional profits;
- 2. Attempts to satisfy dealers complaining about gaps in the existing assortment.
- 3. The desire to use unused production facilities.
- 4. Attempts to become a leading firm with an exhaustive assortment.
- 5. The desire to eliminate gaps in order to prevent competitors.
- *harmony* (*comparison*) reflects how closely the individual assortment groups are interconnected, in terms of end-use commonality, distribution channels, price range, consumer groups, etc. the presence of analogues in terms of end-use commonality, distribution channels, consumer groups and price range). The group assortment and its varieties are characterized by greater harmony, and the mixed assortment is less harmonious. Harmony provides a qualitative characteristic of the assortment and is not measured quantitatively, as a result of which this feature is descriptive.

Assortment planning is an ongoing process and one of the most important functions of enterprise marketing.

Planning of the range of medicines is based on the capabilities of this pharmaceutical company. At the same time, its resources, available finances, sales system, and personnel qualifications are taken into account. It also takes into account the needs of the market for each specific drug, the consumer properties of pharmaceutical products, the requirements of potential consumers, and the motivation for choosing a drug.

Based on the comparison of information on production capabilities and market requirements, the assortment is adapted to individual market segments, new drugs are developed, and the cost and profitability of pharmaceutical products are determined.

After determining the nomenclature of medicines, the pharmaceutical company solves the issue of the width of the assortment, since the optimal profit depends on the correct determination of the range of medicines.

A pharmaceutical company can develop its business in 4 directions

- expand the nomenclature by including new assortment groups of goods;
- increase the saturation of existing assortment groups of goods;
- deepen the nomenclature by offering more options for available products;
- improve harmony between products of different assortment groups.

# Commodity policy of enterprises

After choosing a marketing strategy, the company determines the marketing means of influencing consumers with the help of a product, that is, its product policy.

**Product policy** is a specific activity of the company, which corresponds to the marketing strategy and is aimed at

- study of ways to increase the competitiveness of products, first of all, their quality characteristics,
- creation of new products,
- Assortment formation and management,
- search for market segments,
- development and implementation of a strategy for packaging, labeling, maintenance of goods, etc.

The versatility of commodity policy requires systematic research of the whole range of issues included in it, and the object is not so much the product itself, but the potential consumer with his requests for a particular product.

A well-thought-out commodity policy is an indicator for the management of the enterprise of the general direction of actions in the creation of goods that can meet the needs of customers as much as possible, and therefore in gaining priority positions in the market of competitive products.

Therefore, the decisions made within the framework of commodity policy should include:

- expansion of the range of goods;
- the width of the assortment groups;
- the range of coverage of each product;
- quality of goods;
- production of new goods;
- standardization;
- modification;
- modernization
- diversification
- withdrawal of obsolete goods from production;
- provision of goods with a trademark/

The main ones.

Systematic expansion of the range of medicines or medical devices can take place at the expense of its own *expansion* and at the expense *of replenishment* (saturation).

Expansion of the range is carried out if the pharmaceutical company increases the number of medicines or medical devices compared to what is currently available.

A pharmaceutical company can replenish the range of medicines by developing new drugs. The reasons for the saturation of the range of medicines may be the desire for additional profit, an attempt to satisfy intermediaries, the desire to use excess production capacity, to become a leading pharmaceutical company with a certain range and, finally, to eliminate gaps in the range in order to curb the onslaught of competitors. Updating the assortment in relation to the marketing policy of a pharmaceutical company involves a change in an existing drug, in which the drug is changed and improved radically (often with the use of innovations) or without changing the properties and characteristics of the drug itself or medical products by improving the appearance, packaging, colors, etc.

In addition to the above-mentioned directions of development of marketing policy of medicines, the following are also possible for pharmaceutical enterprises:

- modification adaptation of medicinal products to the special requirements and characteristics of each individual segment, while creating a certain number of modifications in the form of different dosage forms. This allows you to more fully use the opportunities of the market, taking into account the specifics, requirements of individual consumers in different regions of the country, to fill niches where there are no competitors or it is insignificant
- modernization change, improvement of medicines in accordance with modern requirements. It involves the introduction of modern technologies, advanced machinery and equipment in the production of medicines.

In a competitive environment, it is impossible to do without updating, since the novelty of drugs is one of the important criteria for the competitiveness of pharmaceutical enterprises.

• *diversification* - in a general sense, it is the expansion of the activity of large pharmaceutical enterprises beyond the core business, which means the release of a new type of product that is not related to the main production.

Diversification significantly reduces the risk that arises in the production of new medicines. It has positive and negative features. The positive ones are related to the fact that a large enterprise is able to carry out research work more intensively, as well as it is easier to penetrate the market and survive in it. Negative ones are caused by a possible decrease in labor productivity and the level of competition;

Consider the following types of diversification:

*Horizontal diversification* - replenishment of the company's assortment with new products that are not related to the production of current ones, but may arouse the interest of existing consumers (medical cosmetics, medical devices).

Diversification is concentric - replenishment of the assortment with new products that are similar from a technical or marketing point of view to the existing products of the company (herbicides, chemicals, household chemicals). Diversification reduces the danger of shrinking any one segment.

Conglomerate diversification is the replenishment of the assortment with products that have nothing to do with the technology used by the company, or with its current products and markets.

# Innovations in pharmacy

Decisive for the effective operation of a pharmaceutical organization in the market is the creation and production of new products.

Effective activity of pharmaceutical enterprises in a developed competitive environment, changes in consumer demand, the passage of medicines through different stages of the life cycle is possible only on the basis of scientific and technological progress, which is implemented at the enterprise level in the form *of innovations* - innovations.

Innovations in pharmacy are classified into two types:

- food (commodity) and
- process.

Product (commodity) innovations include:

- creation and release of original medicines;
- development and production of generic drugs;
- introduction of new forms of medicines;
- improving the quality of medicines already in production;
- identification of new areas of application of well-known medicines.

Process innovations are divided into:

- technological (introduction of new or improvement of existing technologies);
- organizational and managerial (development of new markets, use of new channels for promotion of medicines and forms of sales promotion, use of new economic, managerial, organizational mechanisms);
- *social* (again, as in food improving the quality of already produced medicines; improving the working conditions of staff, increasing the qualification and professional level of personnel);
- *information* (introduction of information technologies in management, rationalization of information flows).

It should be noted that in the United States, a third of all innovations are process-based, and two-thirds are product-based, that is, the emphasis is on the creation and release of original drugs, the development and release of generic drugs, the introduction of new dosage forms, the improvement of quality and the identification of new areas of application of drugs.

At the same time, in Japan, on the contrary, process innovations are more relevant, that is, through the improvement of existing or the introduction of new technologies, the development of new markets, the use of new promotion channels and forms of sales promotion, as well as the improvement of the quality of medicines, working conditions and qualification of personnel, the introduction of information technologies in management, etc.

Today, there are several dozen definitions of "new products".

There are three main approaches:

- New products include any product that has been manufactured from the beginning; the criterion is the time of its development and production;
  - Products that are used to meet a previously unknown need;
- A new product is also called any progressive change that distinguishes the product from previously known ones, and relates to raw materials, material, technology, external design, etc.

According to the novelty of medicines, the following are distinguished:

- original drug of a new pharmacological group;
- original drug of the existing pharmacological group, including combined preparations based on known substances and dosage forms that improve the pharmacokinetic properties of substances;

• *generic drugs* and traditional drugs that have been used in medical practice for a long time.

An original medicinal product is a drug that is the property of only the company that developed it, or the company that owns the first license for its sale. The active substance of the original medicinal product has a patent, before the expiration of which no other pharmaceutical company has the right to synthesize and use it for commercial and non-commercial needs.

A drug whose patent protection for the active substance has expired is called a *generic drug or a generic drug*.

The generic drug contains an active substance identical to the active substance of the original drug. Excipients that make up the drug (preservatives, fillers, binders, dyes, etc.) and the manufacturing process may differ.

A generic drug can be under the original or common name. Any manufacturer has the right to use a common or generic name, as opposed to the original (trade) name. The list of generic names may differ from the list of international nonproprietary names of pharmaceuticals.

### Development of new medicines, its main stages

The process of creation of medicinal products is regulated by the Law of Ukraine "On Medicinal Products".

Medicines can be created by enterprises, institutions, organizations and citizens. The created drugs must undergo preclinical study, then clinical trials. Only after receiving positive results of clinical approbation, the authorized body of the Ministry of Health – SE "State Expert Center of the Ministry of Health of Ukraine" registers the drug, after which it is allowed for use in Ukraine.

The development of a new drug is carried out sequentially and takes place in several stages. The stages of development of the original and generic drugs are somewhat different.

In the process of creating **original medicines**, the following specific stages are distinguished:

- generation of ideas and their justification;
- directed synthesis of new substances or modification of existing molecules and substances;
- screening of biologically active substances;
- Preliminary development of the medicinal product a preliminary assessment of the proposed chemical compound is carried out for compliance with the basic criteria. During this stage, key points related to harmlessness, pharmacological action, bioavailability, pharmacokinetics, dosage form, acute toxicity of the compound and the possibility of its large-scale synthesis, which may cause problems at the stage of drug development, are evaluated.

The following stages of development of a new drug are the same for both the original and generic drugs:

**Preclinical studies** (involving chemical, physical, biological, microbiological, pharmacological, toxicological and other scientific studies to study their specific activity and safety:

- selection of dosage form, justification of composition and development of technology;
  - development of quality control methods.
  - development of technological regulations;
  - conducting pharmacological studies;
  - development of quality control methods;
  - preparation of a feasibility study;
- submission of materials (registration dossier and samples of the finished drug) to the State Expert Center of the Ministry of Health of Ukraine for obtaining permission for clinical trials of the drug.

*Clinical trials* (conducted to establish or confirm the efficacy and harmlessness (safety) of the medicinal product):

- examination of materials and samples of the drug;
- determination of efficacy and harmlessness;
- summarizing the results of clinical trials;
- obtaining permission for the industrial production of the drug and its medical use.

Clinical trials with a positive decision are carried out in several stages, differing in the number of studied groups of patients and the purpose of the procedure.

For generic medicines, limited clinical trials and bioequivalence determinations are carried out.

### Serial (commercial) production and post-marketing research:

- study of the need and clarification of market capacity;
- demand generation;
- Sales promotion
- accumulation of information on adverse drug reactions

# Marketing activities at the stages of the product life cycle

Upon completion of the process of developing a new product and deploying its commercial production, the market life of the new product begins.

According to the *concept of the product life cycle* (PLC), developed in 1965 by the famous American scientist Theodore Levitt, a product in the process of its market life goes through several successive stages, and then it is ousted from the market by other, more advanced goods.

The concept of PLC connects the volume of sales of goods, profits, marketing strategies with the peculiarities of each individual stage of the market life of the product.

The life cycle is a model of market reaction over time, consisting of the process of developing sales of a product and making a profit/

Classical marketing distinguishes between four stages of PLC:

- market introduction stage
- growth stage
- maturity stage
- recession stage.

In the product life cycle (PLC), you can see the difference in fashion, taste, style, technological progress, technical and psychological obsolescence.

The structure of the life cycle is usually described in several stages (stages) or phases:

- the development and testing phase is costly and combines such processes as drug creation and development, including pre- and clinical trials of drugs
- the phase of bringing the drug to the market introduction (sales are growing slowly, investments in the organization of production and sales are large) is a period of slow growth in sales of drugs, since the market is still not familiar with the new drug. This stage is difficult for the manufacturer, because he does not yet receive profits, because large costs are required to form demand for drugs and promote them on the market (advertising, sales promotion)
- the growth phase (in the growth phase, the zone of covering costs and profits is quickly reached) is the stage of rapid increase in sales volumes and recognition of new drugs by buyers. The company begins to make profits, the level of which is gradually increasing due to the rapid turnover of capital and a decrease in advertising costs. During this period, more competitors appear in the highly profitable market, seeking to displace the position of the manufacturer of this drug. The number of consumers is increasing, there is penetration into new market segments with modifications of drugs, distribution channels are expanding.
- maturity phase (sales are growing, but the pace is decreasing, the product brings the most profit) the growth rate of sales slows down. Most drugs on the modern market are at this stage. There is a certain stabilization in the sale of products. Competition is getting maxed out. The pharmaceutical company strives to maintain the position of the drug in the market. The cost of product promotion is slightly reduced, advertising has the character of a reminder. The consumer of drugs is the mass market, This makes it possible for the company to receive maximum profits. But in the second half of this stage, the market is saturated with goods
- saturation phase (sales growth stops, profit decreases) there is a tendency to reduce sales volumes. A high level of competition leads to lower prices. Firms with weak positions drop out of the market, and the main competitors remain in it. In order to keep the drug at the maturity stage longer and prolong its LC, the following strategies are used: market modifications (expansion, entry into new segments, search for new indications for the use of drugs), modification of the drug (new pharmaceuticals, doses, changes in its characteristics, transfer to the over-the-counter dispensing group, design improvements), modification of the marketing mix (change of pricing policy, distribution channels, emphasis in the advertising campaign, improvement of service)
- the recession phase (a decline in sales and profits that cannot be stopped even with the help of intensive marketing) completes the market life of drugs, no matter how long it is. Sales and profits are falling, the consumers of the drug are mostly conservatives who do not like to change their habits. The decline in sales can be rapid or slow, because the essence of this stage remains unchanged: drugs are obsolete, new ones appear, more advanced preparations. The following strategies are used: to stop the production of obsolete drugs, if the drug is still profitable, to

"harvest" for some time, sharply reducing the cost of its marketing (advertising, sales network), to conclude contracts for its production with subsidiaries in other countries or regions.

• revival phase – for some drugs, the revival stage, which occurs after the saturation stage, becomes relevant. Price reduction and other measures to stimulate sales sometimes help to avoid a complete drop in demand and even bring drugs to the stage of another saturation, but at a lower level, which can continue for a long period. This stage is also relevant for drugs in which new properties and characteristics have been discovered in the process of use, that have expanded the range of their application. The life cycle of such drugs is graphically represented by a curve with a repeated cycle of "ovation"/

The transition from stage to stage occurs without sharp jumps, so the marketing department must closely monitor changes in the pace of sales and profits in order to catch the boundaries and accordingly make changes to the marketing program.

The concept of the product life cycle is important in marketing, as it helps to correctly determine the marketing strategies of the manufacturer depending on the stage at which the drug is.

Each pharmaceutical product has certain consumer characteristics: properties (pharmacological action, side effects, contraindications); brand, packaging and service.

### Elements of Commodity Policy of Medicinal Products

The recognizability of the company's products in the market is an important factor in competition. This is achieved not only by saturating the market with its products by expanding the product range, but also by creating *a corporate identity*.

Corporate identity is a set of graphic, color, language techniques that ensure a certain unity of all products of the company and distinguish them from competitors' products.

*Trade mark* is a name, title, symbol, picture or combination thereof, which are used to identify the goods or services of a particular seller and differentiate them from competitors' products.

In turn, the trademark is divided into:

- a) *company name* a verbal designation that can be pronounced (real and fictitious words, names and surnames, combinations of numbers and letters, etc.); (e.g., the French pharmaceutical company "UPSA", the pharmaceutical company "KRKA" (Slovenia).)
- b) *a trade mark* is a part of a brand that can be recognized, but cannot be pronounced, for example, a symbol, an image, a geometric figure, a distinctive color or a specific font design, less often sounds (call signs) and even smells. ( N apr., company KRKA a black circle, inside which is a white letter "K", etc.)

A trademark is a trade mark that is registered in accordance with the established procedure and has legal protection.

This is a special symbol of commodity property, which shows who has the exclusive right to use and dispose of a certain product and make a profit, and is also

obliged to be responsible for the supply of substandard goods. This is a mark of the manufacturer's intellectual property, the legal protection of which is carried out on the basis of the Law of Ukraine "On the Protection of Rights to Marks for Goods and Services"

A registered trademark is denoted by the letter R in a circle.

Pharmaceutical companies that manufacture generic drugs often produce them under an international non-proprietary name or under a specially invented name, which should be different from the name of the original drug.

*Logo* is an original image of the full or abbreviated name of the company or its products.

*Corporate block* - a sign and a logo combined into a composition, explanatory inscriptions: country, postal address, telephone, telex, slogan, musical accompaniment, etc.

Corporate constants - format, layout system of texts and illustrations.

## Functions of trademarks

- *Informational*, which provides the consumer with information about the manufacturer and high-quality consumer properties of the medicinal product.
- *Protective*, which asserts the exclusive right of the manufacturer or seller to produce or sell a medicinal product under this trademark.
- *Warranty*, which guarantees the quality properties of the drug at all stages of its manufacture and promotion.
- *Stimulating*, which constantly makes the manufacturer or seller concerned about the quality of the drug, which helps to stimulate consumers and increase demand for it.
- *Psychological*, which convinces the consumer that the drug under study is really the best on the market.
- Advertising, which significantly increases the effectiveness of advertising activities and contributes to the sale of the medicinal product.

Good trademarks are simple, individual, attractive, unambiguous, memorable, practical, rational. A successful or well-known trademark is usually distributed by the company not only to this product, but also to related and similar products, as well as their subsequent modifications.

Along with the use of trademarks, an important element of the marketing policy of medicines is the creation of brands.

**Brand** is a stable idea of the consumer about the trademark, its image in the minds of consumers. In other words, a brand is a well-known trademark with a defined, formed position.

A brand is a broad concept that, in addition to the trademark, includes: the drug itself, its characteristics, consumer expectations, associations perceived by consumers, information about the consumer and promises of certain benefits guaranteed by the brand owner.

It is worth noting that any brand is based on the concept of "trademark", but not every trademark is a brand. To become one, it must achieve a certain level of recognition in the pharmaceutical market, gain a positive reputation and the favor and trust of the consumer

Thus, a *brand* is an integral set of features that contains a trademark, a rational and emotional perception by consumers of the manufacturer's (seller's) corporate identity, the trademark and the product itself, as well as measures to promote it in the market.

That is, a brand is an entity that develops over time from a brand (which contains well-known elements – brand name, brand name, style, slogan) to a set of functional and emotional elements clearly perceived by customers, inextricably linked with the drug itself and the way it is presented.

The formation of a brand corresponds to such a direction in the activities of enterprises as branding.

That is, *branding* is a direction of marketing communications specializing in the development of a holistic corporate identity and its elements for the formation and strengthening of the characteristic features of the image and product offer of the enterprise.

Based on who owns the marks, a distinction is made between *manufacturers'* brands and resellers' marks (dealer marks).

Most branded products enter the market with *manufacturers' brands*, which are also called national brands. These brands are aimed at a wide range of consumers and are the guarantor of product quality. Manufacturers spend a lot of money to maintain their brand (quality control, service, advertising, etc.), which leads to an increase in prices for branded goods. The main goal is to increase the circle of supporters of this brand.

Dealer marks (or private labels) contain the name of a well-known wholesale or retail firm. It buys non-branded goods from medium and small producers and puts its trademark on them. For consumers who constantly buy from this intermediary and trust him, the dealer brand . guarantees a certain level of quality regardless of who produced these products.

Since the marketing costs of manufacturers in such a situation are lower, goods with dealer brands are slightly cheaper, which attracts a significant range of consumers. The main goal in the use of private labels is to increase the number of regular customers of this retail chain. (ATB, Auchan, Lavka Zhizni, Zelenaya Pharmacy)

A third option is also possible - the use of the concept of *franchising in trademark practice* (in Ukrainian legislation - licensing). Its essence lies in the fact that the well-known large enterprise - the franchisor - on a license basis grants the right to use its trademark (and the corresponding technology) to a small independent enterprise-licensee. The latter uses the authority and trust of consumers in a well-known brand, but at the same time assumes great responsibility for maintaining his authority.

Franchising is one of the most effective ways to develop a brand, common in all civilized countries. Its essence lies in the fact that the franchisor (owner company) provides the franchisee (entrepreneur or other company) with a ready-made model of its successful business, for which it charges a certain fee. As a result, the

franchisee gets the opportunity to quickly open their own effective business under a well-known brand.

In the pharmaceutical industry this model is practically underdeveloped. D.S. Pharmacy Network considers franchising as one of the strategic directions of its development.

#### Trademark Strategies

Both manufacturers and resellers can focus on different trade mark strategies in their practice.

When focusing on the strategy *of group brands*, the company uses one name for all its products (for example, the manufacturer of medical devices JSC "Kievguma", the manufacturer of medical equipment and equipment "Siemens").

Group brands are most effective for specialized enterprises, as they make it possible to create a single image for them and reduce the cost of advertising and sales promotion.

The advantages of group brands are very evident when introducing new products of the enterprise to the market. Consumers are quick to accept a new product because it has appeared under a well-known brand that they trust. The manufacturer's costs for advertising new products are significantly reduced.

The main *disadvantage* of the group brand strategy is that it virtually negates the efforts of differentiated marketing.

The strategy of a multi-brand approach involves the use of individual brands for each product of the enterprise. The multi-brand approach strategy is used by most pharmaceutical companies.

The advantage of this approach is the ability to attract different market segments. However, at the same time, the cost of promoting a large number of brands increases sharply, and new products do not benefit from an already known name.

In order to combine the advantages of group and individual brand strategies, some firms use *combined approaches*.

These can be *collective brand names for individual assortment groups of goods*. An example is the company "Smith Klein Beacham", which uses collective brand names for certain assortment groups of goods ("Coldrex tablets", "Coldrex Hotrem - hot drink", "Coldrex Knight - syrup to relieve cold and flu symptoms at night" or "Ox and - lotion for washing").

Another option for a combined strategy is *to combine a brand name with an individual brand of goods*. This strategy was chosen by the pharmaceutical company "Darnitsa" (ointment "Cortonitol-Darnitsa", ointment "Prednicarb-Darnitsa"), (ampoules "B Inblastin-Richter", tablets "Ovidon-Richter").

Manufacturers of generic medicines include in their name a part of the international nonproprietary name and an element of the company name. This process is called *the creation of umbrella brands or corporate branding*. This strategy is used by many well-known companies that produce generics. Corporate names are an economical way to create an "image" of the manufacturer's company, since the success of any of the drugs of the "umbrella" series increases the popularity of the rest of the drugs of the same company (Validol-Darnitsa, Loratadine-MPC)

Another element of the product policy is packaging, which in a developed market is becoming an increasingly effective marketing tool, a component of the company's image and the subject of innovative search.

**Packaging** is a part of product planning, during which the company studies, develops and makes its packaging, which includes the container itself in which the product is placed, the label and the inserts There are three *types of packaging*:

- The inner (primary) packaging is the direct receptacle of the goods. So, for tincture, it will be the glass into which it is poured.
- Outer (secondary) packaging is a structure designed to protect the inner packaging, which is destroyed when preparing the goods for direct use (for example, a cardboard box).
- Transport packaging is a structure designed for packaging, storage, transportation of goods.

Packaging also includes labels and styling.

There are the following *packaging functions*:

- containment and protection;
- product Identification
- ease of use (re-consumption of packaging);
- communication (with the consumer, because he demonstrates the trademark, indicates the name, composition and pharmacological action, etc.);
  - attracts the buyer;
  - market segmentation (packaging can be made for a specific market group;
  - cooperation with distribution channels.

According to the Law of Ukraine "On Medicinal Products", *the labeling* applied to the outer and inner packaging of the medicinal product must contain the following information:

- name of the medicinal product;
- name and address of its manufacturer;
- registration number;
- series number;
- method of application;
- the dose of the active ingredient in each unit and their quantity in the package;
- shelf life;
- storage conditions;
- precautionary measures.

On the outer packaging of medicines, also in the font

The name of the medicinal product, the dose of the active ingredient and the dosage form are indicated in Braille.

For each medicinal product that is sold, instructions for use are attached. Tools.

Packing per medicinal product. The product differs from packages for other goods in that it contains information such content as "Keep out of reach of children", "Store in a cool place", "Use only as prescribed by a doctor", etc., in addition, the packaging on the product is distinguished by its simplicity of form (unlike, for example, packaging for cosmetics.

Thus, when creating packaging, you need to remember that it is not only the business card of the manufacturer or distributor, but also a very important tool for advertising, demand generation and its stimulation in general.

Of great importance for solving the problem of reliability of information on packaging and product identification is the widespread use *of the barcoding system of goods*.

Barcoding is effectively used in systems in which human participation is minimal or absent at all. The use of barcoding technologies corrects errors that occur when writing data manually as much as possible. The barcode is widely used, including for identification of goods, inventory, marking of goods, etc.

There are several such systems in the world. The most common of them is the European system EAN ("European Article"), which is a variation of the American system UPC - "Universal Product Code".

The Association of Commodity Numbering of Ukraine (EAM - Ukraine) was established, which is a member of the International EAM Association (Brussels).

The presence of a barcode is the norm in the world market, it carries a large amount of information. So, in the EA code N - 13, the first three digits identify the country where the goods are produced - this is the so-called "flag of the state". The next 4 digits identify the manufacturer, another 5 - the name of the product, some of its consumer properties (size, weight, ingredients, color, etc.). The last digit is the check digit, it is used to check the correctness of the reading of the previous digits of the code by the scanning system.

A barcode is information encoded using stripes of different thicknesses and numbers, placed in the form of a label on the package. The information is read by the light beam as it passes through the barcode. In this way, any product can be identified.

Medicines that are exported or sold in Ukraine through wholesale or retail pharmaceutical institutions must be marked with bar codes. When concluding contracts with manufacturers for the supply of medicines, business entities must include in the contract the requirements for the labeling of drugs.

The following are exempt from mandatory bar coding:

- Prototypes;
- Medicines made according to individual recipes and requirements.
- medicines, dressings, etc., which are sold directly to buyers by weighing or other measurement.

The widespread use of the barcoding system helps to solve the problem of identifying goods and protecting consumers from any counterfeiting.

#### PRACTICAL ASSIGNMENTS

- **Task 1**. Provide the consumer properties of the pharmaceutical product in the form of a scheme.
- Task 2. Choose the appropriate characteristic for the indicators of the product assortment.

Indicators of the product range		
Width		
Depth		
Saturation		
Harmony		

Characteristic				
The degree of proximity between individual				
assortment groups from the point of view of				
their final use				
The total number of assortment groups of				
goods				
The total number of components				
goods				
The number of positions in				
assortment group				

*Task 3*. In the form of a scheme, indicate the main directions of development of the product policy of the pharmaceutical enterprise, give a brief description of them

**Task 4.** Graphically display the stages of the life cycle of a medicinal product (*Fig. 5.1*). To characterize the marketing indicators at different stages of the drug life cycle. Present the results in *tab. 5.1*.

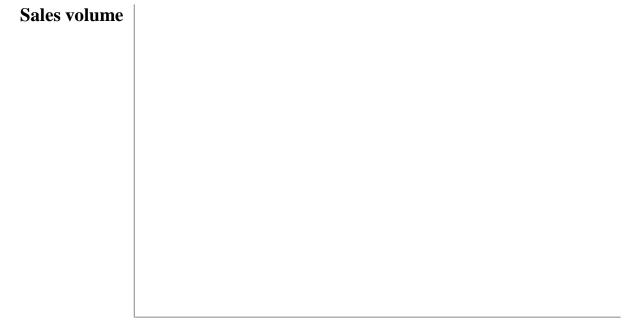


Fig. 5.1. Stages of the drug life cycle

Time Q

Indicators	The main stages of the product life cycle					
	implementation	growth	maturity	decline		
1	2	3	4	5		
Target						
Sales						
Profit						
Competition						
Price						
Drug						
promotion						
costs						
Advertising						
content						
Consumers						

After completing the practical assignment, the student should acquire practical skills and abilities:

- determine the consumer properties of the product;
- determine the indicators of the product range;
- to highlight the main directions of the product policy of pharmaceutical enterprises;
  - to characterize marketing indicators at different stages of the drug life cycle.

#### **SELF-CHECK TESTS**

1

A product of labor produced for sale on the market, with the help of which a certain need can be satisfied, it is:

- A. Product
- B. Product life cycle
- C. Demand
- D. Offer
- E. Profit

2

Which of the following groups of medicinal products is characterized by a "seasonal" type of product life cycle?

A. Antiviral

- B. Anticoagulants
- C. Antidiabetic
- D. Anabolic
- E. Antiblastoma

3

The company is expanding its range of products due to the introduction into production of a medicinal product whose patent has expired. Such a medicine is called:

- A. Generic
- B. Original
- C. Branded
- D. Falsified
- E. Proprietary

4

The product range is a set of assortment groups of products offered by the company. The indicator that reflects the number of items in each assortment group is called:

- A. The depth of the product range
- B. The width of the product range
- C. Filling the product range
- D. Assortment of goods
- E. Works from the product range

5

The pharmaceutical company produces 5 assortment groups of goods, namely: vitamins, tinctures of adaptogens of plant origin, detoxification solutions for infusions, solutions of antiseptics for external use, liquid plant extracts. The specified number of assortment groups characterizes:

- A. The width of the product range
- B. The depth of the product range
- C. Saturation of the product range
- D. Harmony of the product range
- E. Subordination of product range

6

Pharmaceutical enterprise 'Pharmastar' develops new dosage forms for its medicines. What is the direction of development of marketing commodity policy?

- A. Product modification
- B. Abbreviation
- C. Modernization
- D. Diversification
- E. Differentiation

7

The effective operation of the pharmaceutical enterprise "Darnytsia" is possible on the basis of scientific and technical progress, which is realized in the form of innovations. Regarding product innovation?

- A. Creation and release of original medicines
- B. Implementation of new technologies
- C. Development of new markets
- D. Improvement of staff working conditions
- E. Rationalization of information flows

8

The life cycle of a product is a model of market response over time. The structure of the life cycle is described by several stages. Specify the correct sequence of stages of the life cycle of goods.

- A. Implementation, growth, maturity, decline
- B. Implementation, decline, maturity, growth
- C. Implementation, growth, decline, maturity
- D. Implementation, maturity, growth, decline
- E. Growth, implementation, maturity, decline

9

In order to distinguish its products on the market, the company uses the corporate color of the packaging, the trademark and the company logo. What is the name of this set of methods of the manufacturer?

- A. Corporate style
- B. Branding
- C. Marketing
- D. Coding
- E. Innovative policy

10

A well-known large enterprise on a licensing basis grants the right to use its trademark and the corresponding technology to a small independent enterprise that uses the authority and trust of consumers of a well-known brand. What is the name of this concept?

- A. Franchising
- B. Merchandising
- C. Use of dealer brand
- D. Use of the trademark
- E. Use of the manufacturer's brand

### TOPIC 6

# PRICE, PRICING, PRICING POLICY OF PHARMACEUTICAL ENTERPRISES

**Students should know:** the concept of the price of a product, factors influencing its formation; pricing of medicinal products, pricing policy of pharmaceutical enterprises

Basic terms and concepts: price, pricing strategies, pricing models and methods

#### **QUESTIONS**

- 1. Price as one of the constituent elements of the marketing complex. Pricing goals.
- 2. Factors affecting the price policy of the enterprise.
- 3. Pricing strategies.
- 4. Pricing models.
- 5. Pricing methods.
- 6. Stages of pricing and their brief description.
- 7. Setting the final price for the product. Adjusting the price to the market.

# SELF-CHECK QUESTIONS

- 1. Price is a controlled marketing factor.
- 2. Pricing goals of the enterprise:
  - 2.1. Ensuring the survival;
  - 2.2. Increasing or maximizing profits;
  - 2.3. Increase in market share;
  - 2.4. Gaining leadership in the quality of the medicinal product.
- 3. Analysis of factors affecting the enterprise's pricing policy:
  - 3.1. Situational factors (demand, supply and external environment);
  - 3.2. Estimation of costs;
  - 3.3. Analysis of the price elasticity of demand for goods;
  - 3.4. Analysis of competitor`s prices.
- 4. Choosing a pricing strategy:
  - 4.1. Market penetration strategy;
  - 4.2. The strategy of the price leader (skimming strategy, the strategy of prestigious prices, the strategy of discriminatory prices);
  - 4.3. Strategy according to "price-effectiveness" indicators»;
  - 4.4. Strategies of the "associated" market (preferential pricing strategy, Strategy of flexible (elastic) prices, Single pricing strategy, The strategy of unstable prices, The strategy of competitive prices, Strategy of unrounded prices, Bulk purchasing strategy);

- 5. Choice of pricing model and method:
  - 5.1. Cost-based pricing model (Method of allowances (markups), target return on investment method);
  - 5.2. Pricing model based on market demand (Method of maximizing current profit, Method of setting the price based on the tangible "value" of the product, Method of setting contract prices in conditions of inflation);
  - 5.3. Pricing model based on competition (Method of pricing based on the level of current prices, Method of determining the price according to the level of competitiveness, Method of price determination based on bidding (tender pricing)).
- 6. Adjustment of the price to the market:
  - 6.1. Amendments to the terms of payment (receipt of an advance, granting of a loan, acceleration of payments, cash settlements);
  - 6.2. Discounts (for the quantity of goods purchased, functional, bonus, seasonal, special).

#### **OVERVIEW**

Historically, prices have always been set by buyers and sellers in the process of trading. Price is one of the most important factors determining the choice of buyers and the demand for goods. Therefore, the market and the price are categories determined by commodity production. Moreover, the market is primary.

This is explained by the fact that in commodity production economic relations are manifested mainly not in the production process itself, but through the market. It is the market that acts as the main form of manifestation of commodity-money relations and cost categories.

Thus, Price is one of the most important elements of the marketing mix and *its most flexible element*. In contrast to the properties of goods and obligations in relation to distribution channels, the price can be changed quickly.

Until recently, price decisions were made within the <u>framework of a purely financial approach</u>, that is, they were determined mainly on the basis of costs and profitability.

Market entry and the volatility of the environment have changed the state of affairs: *inflation*, *rising commodity prices*, *price controls*, *increased competition*, *reduced purchasing power* - all these factors have strengthened the strategic role of pricing.

The main feature of market pricing is that the real process of price formation takes place not in the sphere of production, not at the enterprise, but in the sphere of product sales, that is, in the market under the influence of supply and demand. The price of a commodity and its usefulness are tested by the market and are finally formed in the market.

The fundamental difference between market pricing and planned pricing is that prices for goods must be determined (set) by owners, business entities.

Enterprises sell their products, works, services, as a rule, at prices and tariffs established independently or on a contractual basis, and only in certain cases, provided for by legislative acts, at state prices.

The state determines only the general rules and principles of pricing, and depending on the economic situation, it can regulate prices only for a limited number of goods,

State regulation of prices is allowed for the products of enterprises that occupy a monopoly position in the commodity market, as well as for goods and services that determine the scale of prices in the economy and the social protection of individual groups of the population.

The pricing mechanism is manifested through prices and their dynamics.

Price dynamics are formed under the influence of two most important factors: strategic and tactical.

*The strategic factor* is that prices are formed based on the cost of goods. There are constant price fluctuations around value.

*Tactical* is manifested in the fact that prices for competitive goods are formed under the influence of market conditions.

The first factor is the factor of long-term prospective action, the second can change frequently. Both the first and the second factors are very important in a market economy. They must be taken into account, otherwise the company will be in a very difficult situation.

<u>The first factor</u> puts the most favorable conditions for those enterprises that have modern equipment, technology, use advanced methods of labor organization, etc. The greatest benefit is received by the one whose individual production costs are lower.

<u>The second factor</u> helps those enterprises that quickly know how to take advantage of the conjuncture. However, the greatest confidence in success and gain in the market are received by those enterprises that have the opportunity to use both factors.

The market mechanism of pricing creates conditions for healthy competition and the elimination of monopolism in industry and trade.

So, in a narrow sense, *price* is the amount of money that the seller asks for a product or service.

In a broad sense, it is the sum of those values that the consumer gives in exchange for the right to own or use a product or service.

At the organizational level, price plays a dual role: it is *a tool for stimulating demand* and at the same time it is *a major factor in long-term profitability*.

Ukraine has adopted the Law "On Prices and Pricing", which regulates pricing policy. The law applies to all enterprises and organizations regardless of their form of ownership.

According to the Law of Ukraine "On Prices and Pricing", *the price* is the monetary equivalent of a product unit.

The price acts as the main and universal form of communication between the manufacturer of the product and the market. It makes possible or impossible the

purchase and sale of the commodity itself, and consequently the economic existence of the producer itself.

The following five pricing functions can be distinguished:

- 1. The price acts as a means of accounting and measuring the costs of social labor for the production of goods (measuring function), accounting.
- 2. Serves as a means of maintaining and regulating equilibrium in the economic system (equalizing function).
- 3. Carries out the connection between production and consumption, supply and demand (connecting function).
- 4. It serves as one of the most important incentives that force producers to increase or decrease the volume of production of certain goods, in accordance with the movement of effective demand of the population (stimulating function).
- 5. Using regulated prices, the state implements a policy of redistribution of national income for certain economic, social or political purposes (regulatory function).

#### **Classification of prices**

In a free market, the relationship between the seller and the buyer develops naturally and is not regulated by anyone. The results of the relationship are reflected in market prices.

The market price is the actual price, which is determined according to the supply and demand of goods.

Depending on the purchase and sale of goods and services, different types of prices are established, which can be classified into separate main groups.

- 1. According to the degree of state influence on pricing, the following are distinguished:
- *free prices*. They are formed depending on the state of market conditions and are established without state interference on the basis of a free agreement between the seller and the buyer. State bodies, not participating in the formation of free prices, exercise control functions:
- regulated prices. For certain groups of goods, the state sets an upper limit of the price, which is prohibited to be exceeded. In a market economy, such price management applies to vital goods and services (medicines, strategic raw materials, energy, public transport, consumer essentials);

In accordance with the Law of Ukraine "On Prices and Pricing", state regulation of prices is carried out by the Cabinet of Ministers of Ukraine, executive authorities and local self-government bodies by

- 1) establishment of mandatory for use by business entities:
  - fixed prices;
  - price caps;
  - marginal levels of trade markup (markup) and supply and sale markup (supplier's remuneration);
  - marginal standards of profitability;
  - the amount of the supplier's remuneration;
  - the amount of surcharges, discounts (discount coefficients);

2) introduction of the procedure for declaring price changes and/or price registration

To date, the regulation of prices for medicines is carried out in accordance with the Resolution of the Cabinet of Ministers of Ukraine dated 17.10.2008 No. 955 "On Measures to Stabilize Prices for Medicines and Medical Devices", which establishes the levels of marginal trade margins (markups) for medicines included in the National List of Essential Medicines and Medical Devices, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 25.03.2009 No. 333 "Some Issues of State Regulation of Prices for Medicines and Medical Devices".

They define such terms as the maximum supply and sale markup, the maximum trade (retail) markup, the wholesale price, the purchase price, the retail price, as well as the procedure for their formation.

The PROCEDURE for the formation of prices for medicines and medical devices, in respect of which state regulation has been introduced, determines the mechanism for the formation of prices for medicines and medical devices, in respect of which state regulation has been introduced, for sale by a business entity in the domestic market (hereinafter referred to as the product), taking into account the maximum supply, sale and trade (retail) markups.

- 2. Depending on the forms and areas of trade, prices are divided into the following types:
- wholesale prices (wholesale prices of the enterprise, wholesale selling prices of industry);
  - retail prices;
  - tariffs for services.

Wholesale prices are the prices at which the products of enterprises, firms and organizations are sold and purchased, regardless of the form of ownership, in the order of wholesale turnover.

*Retail prices* are the prices at which goods are sold to the public, businesses and organizations.

*Tariffs* for services are prices (rates) that determine the level of payment for utilities and household services.

3. Auction and exchange prices are prices formed on the corresponding types of markets, which belong to the type of free market.

*The auction* price is the direct price of the item sold at the auction.

*Exchange* price is the price of goods, securities and services sold in the order of exchange trading, which is formed on the basis of supply and demand.

World market prices are prices that have actually been established for goods of a given group on the world market and are recognized by international trade organizations for a certain period.

Contract (foreign trade) prices for those who go for export and import foreign trade activities

The price should be set by the enterprise in such a way that, on the one hand, to satisfy the needs and requirements of buyers, and on the other hand, to contribute to the achievement of the set goals, to ensure the receipt of sufficient financial resources.

Any organization (firm) must clearly define for itself what it wants to achieve by maneuvering prices, what is the purpose of pricing? In the theory of marketing and its practical implementation in the form of a certain pricing policy, the main goals of pricing are of the greatest importance:

- 1) ensuring the survival of the organization is important when there is an overproduction of goods, intensification of competition or a change in consumer needs. In order to increase demand, the company usually reduces the price, but such an event may be short-lived;
  - 2) increasing or maximizing profits;
- 3) *increase in market share* Sometimes enterprises (firms) strive to maximize their market share and significantly reduce prices, believing that this guarantees minimum costs and maximum profit in the long run;
- 4) gaining leadership in the quality of the medicinal product involves setting a high price;

Decisions made by an enterprise in the field of pricing are subject to the influence of internal and external factors.

Internal factors influencing pricing include:

- Marketing goals of the company,
- Marketing strategy,
- Costs (prime cost),
- Stage of the product life cycle.

Goals (see above).

The marketing strategy of the enterprise affects pricing as an element of the entire marketing mix. Therefore, decisions on prices should be coordinated with decisions on product positioning, sales channels, and promotion methods. Changing any of the components of the marketing mix requires a revision of the company's pricing policy.

The cost of production of products is the main constraint on the minimum price. The company strives to set such a price to cover the costs of production, sales and a set of measures to promote the product, as well as to make a sufficient profit to compensate for the costs and risk.

The costs of raw materials, components, labor, advertising, transport, etc., often cannot be controlled by the firm, but must be taken into account in pricing.

Pricing also depends on the stage of the product life cycle.

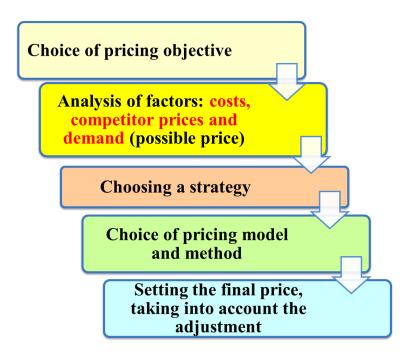
Among the external factors influencing pricing, the following stand out:

- Consumers, (demand and its elasticity);
- State regulation of prices;
- Participants of sales channels (intermediaries);
- Competitors.

Taking into account the factors influencing pricing, the following can be comprehensively reflected in the concept of "possible price":

Lower price limit	POSSIBLE PRICE			Upper price limit
It is impossible to make a profit at such a low price	Cost of the medicinal product (costs)	Competitors' prices	Demand the medicinal product	Formation of demand at such a price is impossible

Pricing is the process of forming and setting prices. This is a complex and multi-stage process that can be presented in the form of a diagram:



#### **Pricing Strategies**

Under any conditions, the company cannot afford one thing - to set prices without a serious analysis of the possible consequences of each of the options for such a decision. Moreover, an analysis of the activities of prosperous firms shows that, as a rule, they have both a clear price policy and a certain pricing strategy.

*Policy* refers to the general principles that an organization is going to adhere to in setting prices for its goods or services.

A pricing strategy is accordingly understood as a set of methods by which these principles can be put into practice.

The pricing policy of the company can be formed on costs, demand and competition.

In the first case, prices are determined based on production costs, maintenance costs, overheads, and estimated profits.

In the second, it is determined after studying consumer demand and setting prices acceptable to the target market.

In the third, prices can be at the market level, above or below them.

Practice has accumulated extensive *experience in the development of pricing strategies and pricing policy*, and the latter, to a large extent, depends on the competitive structure of the target market.

**Pricing strategy** is the choice of possible dynamics of changes in the initial price of goods in market conditions, which would best meet the goal of the enterprise

Like any planned activity, the pricing strategy begins with a clear definition of the goal and ends with an adaptive and corrective mechanism.

The choice of strategy depends on the characteristics of the medicinal product, i.e. its novelty, conditions of competition, market and sales characteristics, production costs, and the image of the manufacturer.

When choosing an appropriate pricing strategy, they take into account the goals of the company's pricing policy, as well as the psychology of price perception.

The company's pricing strategy undergoes changes as the product goes through its life cycle.

*Market penetration strategy* is to set a low price for a drug in order to attract more consumers and gain a large market share.

This strategy is chosen by manufacturers who are just starting out or developing a new market segment. By setting fairly low prices for their drugs, they hope in this way to get a large number of consumers and capture a significant part of the market. The "penetration" strategy is used by manufacturers of drugs that do not have patent protection and a trademark, i.e. generic drugs.

The following conditions contribute to the establishment of the penetration price:

- High price elasticity of demand in the market;
- Reduction of costs for the production and sale of medicines due to an increase in sales volumes;
- Serial production of broad-spectrum drugs;
- Unattractiveness of the low price of drugs for possible competitors/

Strategy of the price leader. This strategy is relevant for large pharmaceutical firms. It involves the production and sale of high-quality competitive products.

Pharmaceutical firms that follow this strategy develop appropriate strategies:

- Skimming strategy;
- The strategy of prestigious prices;
- The strategy of discriminatory prices.

**Skimming Strategy.** In the case of using such a strategy, the pharmaceutical firm *first sets high prestige prices* for original drugs *that have no analogues*, which make them available only to high-income consumers.

The main factor in the implementation of this strategy is the high level of demand from consumers.

After the slowdown of the first wave of sales, prices are gradually reduced, which makes it possible to attract more market segments to the purchase of drugs.

The choice of the "skimming the cream" strategy is due to the following factors:

 Helps to compensate for significant costs for research and development of fundamentally new drugs ("pioneers") and their introduction into production, as well as for advertising during the introduction of new products to the market;

- The first group of consumers of a new drug (the high-income segment) is less sensitive to the high price than the others;
- The high initial price creates an image of high quality drugs;
- An increase in the initial price often leads to market resistance, while its gradual decline is perceived benevolently.

The strategy of prestigious prices - consumers associate high prices with high quality and efficiency of the product. They are installed by firms that have a positive image in the commodity market. Consumers perceive a high price as a guarantee against falsification and counterfeiting. But on farm. This strategy is rarely used in the market.

The strategy of discriminatory prices is chosen when a company sells the same product at different prices with constant costs (expenses). (For example, a firm may sell a product at a low price to consumers in whom it is very interested (this may be a trade secret).

In some cases, the use of discriminatory prices may be prohibited by law. In others, on the contrary, such prices are introduced at the suggestion of the state or with its approval and have the character of preferential prices for some market segments.

Price discrimination is used when the market can be divided into groups of consumers who are characterized by different elasticity of demand, there is a possibility of isolating groups of consumers operating in different market segments (geographical discrimination in the pharmaceutical markets of Ukraine and other countries).

**Price-quality strategy.** To set prices for new drugs, analogues of which already exist on the market, different strategies can be used in terms of "price-effectiveness" indicators, taking into account the conditions of a particular market. In such a situation, the price serves as a means of positioning this drug among competitors' drugs.

		Price		
		High	Medium	Low
ii III	1. Premium Markup	2. Deep Market	3. Advantage Strategy	
len High		Strategy	Penetration Strategy	5. Auvantage Strategy
Efficiency/Quali tv	Mediumя	4. Strategy of ostentatious brilliance	5. Strategy of medium level	6. Strategy of good quality
	Low	7. Robbery strategy	8. Overpriced strategy	9. Cheap medicine strategy

Pricing strategies 1, 5, 9 can be used in the same market. They show price differentiation depending on the level of quality: the company offers high-efficiency drugs at a high price, medium-efficiency drugs at an average price, low-efficiency drugs at a low price. The condition for the simultaneous use of these pricing strategies is only the presence of relevant market segments that show demand for medicines of different effectiveness and price.

Positions 2, 3, 6 represent different variants of the pricing strategy aimed at displacing competitors from positions 1, 5, 9. These are strategies for creating price advantages. Their representatives may advertise themselves as follows: "We offer drugs of the same efficacy / quality, but at reasonable prices!"

In contrast, strategies 4, 7, 8 reflect an overpricing of the beneficial effect of the drug. If a firm uses such strategies in a developed market, its consumers will feel misled and it will hurt the firm.

**Associated Market Strategies.** A huge number of strategies is explained by creating an idea of the comparability of the characteristics of drugs with the same similar drugs of competitors:

- Preferential pricing strategy
  - ✓ Prices are set below the market price.
  - ✓ Its goal is to increase sales.
  - ✓ This strategy is used at the end of the product life cycle and is manifested in the application of various discounts.

(relevant for medicines that are characterized by seasonal demand, as well as in case of a threat of expiration of medicines).

- Strategy of flexible (elastic) prices
  - ✓ The strategy relies on changing the level of selling prices depending on the buyer's ability to bargain.
  - ✓ Flexible prices, as a rule, are used when concluding transactions for individual goods and goods made to order.

(the level of which depends on the size of the batch of c.c., terms of payment (prepayment, upon delivery, for sale for a certain number of banking days, etc.).

- Single pricing strategy
  - ✓ A price is set that is the same for all consumers to strengthen their confidence in the enterprise and its product.
  - ✓ The strategy is rarely used in practice, limited by time, geographic and commodity frameworks.

(assumes that the pharmaceutical company sets the same markup for all consumers who would like to purchase hp under similar conditions. A single price is clearly indicated on the packaging (subject to financial stability) The strategy is usually chosen for vital medicines in order to increase their availability to consumers).

- The strategy of unstable prices
  - ✓ Prices depend on the market situation, consumer demand or the costs of production and sales of the enterprise itself, which sets different price levels for different markets and their segments.

(used by a significant number of both manufacturers and commercial pharmaceutical enterprises, prices vary depending on the costs of the company. market conditions).

- *The strategy of competitive prices* is associated with the implementation of an aggressive policy to reduce prices by competing enterprises. It has 2 directions:
  - 1. conducts a price attack on its competitors and reduces prices to a level below the current one in the market;
  - 2. does not change prices, despite the fact that competing enterprises have already done so.

- Strategy of unrounded prices
  - ✓ These are discounted prices against some round sum. For example, 9.95.

Consumers get the impression that the company carefully analyzes its prices, sets them at a minimum level. They like to get change.

(involves setting prices that are a few units less than the round number (4.95) They are perceived by consumers as carefully calculated. At the same time, it seems that the drugs have a slightly lower cost than in reality. But, if a firm seeks to create an image of an expensive high-quality drug, rather than an affordable drug, it should abandon the strategy of unrounded prices)

- Bulk Purchasing Strategy
  - provides for the sale of goods at a discount in case of their purchase in large quantities;
  - gives the effect of a significant increase in purchases, an increase in the consumption of goods, attracts the attention of buyers of goods from competing enterprises, solves the problem of freeing warehouses from obsolete drugs and those that are poorly sold.

(most often, a discount is provided for wholesalers, depending on the quantity of purchased goods, and regular customers receive benefits).

When introducing innovative drugs to the market, two main pricing strategies are used:

- strategy of skimming the cream and
- a strategy for a solid introduction to the market.

There are three main strategies for positioning the price of drugs that are no longer new on the market:

- price maintenance,
- price reduction and
- price increase.

## **Pricing Models and Methods**

In pricing practice, <u>a variety of methods are used to determine the initial price of goods</u>, which can be combined into three basic models, taking into account the factors that determine the pricing policy of the company:

- 1) cost-based pricing model;
- 2) demand-based pricing model;
- 3) a pricing model based on competition.

The use of any of these models involves taking into account the factors underlying the other two models. So, if you use a cost-based model, it is advisable to adjust the price of a product taking into account the market demand for this product and the prices of competitors' products.

Each model includes (contains) specific pricing methods.

## 1. Cost-Based Pricing Model

Method of allowances (markups)

The price of a drug is determined by adding a certain surcharge to the cost of its production and sale.

$$P = C \times (1 + \frac{sc}{100})$$

where

C - is the cost of medicines

Sc - is an allowance in % to the cost price.

When using this pricing method, current changes in demand and the competitive environment are not taken into account. This means that the use of fixed markups quite often leads to suboptimal pricing decisions.

However, the method is very popular because:

- It is very easy to use, as the company knows much more about its own costs than about market demand;
- If it is chosen by all market manufacturers, the prices for their drugs will be almost the same, and price competition will not take harsh forms;
- Many producers and consumers think that the method of average markups is the most correct and prevents one of the parties from enriching themselves at the expense of the other;
- The greatest effect from the use of this method can be achieved if you take the average premiums in the industry only as a benchmark, and the subsequent price is adjusted taking into account the conditions of a particular market.

#### • The method of ensuring the target profit on invested capital

The pharmaceutical company strives to set a price that will make it possible to cover all costs and get the planned rate of return on invested capital.

A cost-based pricing method and a target rate of return. At the same time, companies strive to set a price, to include in it the profit, which is planned as a percentage of the capital invested. At the same time, the concept of break-even (changes in total costs and total revenues depending on the level of sales) is used.

The following formula is used to determine break-even:

When fixed and variable costs are known and a certain amount of production is given, it is possible to determine the price that will break even. To do this, use a formula that is a derivative of the above:

And the price of a package of a drug that provides a target profit is calculated as follows:

At the same time, the volume of demand for the product (price elasticity of demand) and competitors' prices are not taken into account. The value of this method lies in the fact that the company can analyze the impact of its fixed and variable costs on price formation.

#### 2. Pricing model based on market demand

#### • The method of maximizing current profit

It is advisable to use this method for drugs with a fairly high elasticity of demand to price. A difficult issue in the case of using this method is to establish the relationship between the price of the drug and the demand for it (sales volume)

To obtain information, you can use market testing of the product, during which the price is reduced several times and the volume of sales of the drug is fixed after each adjustment of its value. The results are processed using the techniques of correlation and regression analysis. As a result, they find the optimal price for drugs, which will provide the company with maximum profit for a certain period. If the situation changes over time, the price should be adjusted.

• A method of setting the price based on the tangible "value" of the product is focused on consumers, their consumer perception, which is very important for socially significant goods, which include medicines. To form an idea in the minds of consumers about the value of pharmaceutical products, firms are obliged to use non-price methods of influence - a markup for a convenient dosage regimen, greater safety, efficiency, rapid onset of pharmacological effect, lower cost of treatment, long shelf life, convenient and safe packaging, etc. By purchasing such a drug, the consumer saves money, thus receiving additional benefits during use (convenience, safety, effectiveness), which justifies its high cost.

## • The method of setting contract prices in conditions of inflation

Methods of setting contractual prices for medicines in the context of inflation relate to production and wholesale sales.

In the simplest version, the price is agreed upon at the time of the conclusion of the contract and is not subject to revision in the course of its execution under any circumstances - this is a fixed or fixed price. The method is effective when there is a slight difference in time between the conclusion of the contract and payment or payment and delivery of medicines at low inflation rates.

In conditions of inflation, it is advantageous to use a price that is fixed on a certain date (1) or it is calculated according to an agreed formula (2) or set in the equivalent to hard currency (3):

- 1) The method consists in setting the price not at the time of conclusion of the contract, but at the date on which the price will be determined (the day of delivery (shipment) or its payment); The contract must specify the source of information about prices (for example, the price tag)
- 2) The method provides for the establishment in the contract of the base price, i.e. the price accepted for both parties at the time of its adjustment (indicating the source of information for its implementation for example, the inflation index, the price index for a group of medicines that are presented by the statistical authorities and officially registered)

3) The method involves setting the price in the equivalent to hard currency. It is widespread and is often used not only in foreign economic contracts, but also in domestic ones.

All disadvantages can be avoided by applying in practice the method according to which the base contract price is set in UAH at the time of conclusion of the contract and is subject to change in accordance with the change in the exchange rate of foreign currency according to the formula specified in the contract, i.e. recalculation at the time of termination of the contract, on the date of payment or other date specified in the contract. The formula for the contract price in this case is as follows:

$$P_{contr} = P_{base} \times \frac{100 + I_n + C_{contr}}{100}$$

where:

P contr - the price is negotiable, UAH;

P <sub>base</sub> - base price, UAH;

In – increase in the inflation index of the group's drug prices or another similar indicator during the contract period,%;

C \_ contractual coefficient, %

It should be noted that in practice, firms can simultaneously apply several pricing methods in relation to different types of pharmaceutical activities, groups and names of pharmaceutical products, as well as market segments.

## 3. Pricing model based on competition

• *The method of pricing based on the level of current prices.* Also called the proportional pricing method.

Pro-rata pricing is the setting of prices according to competitors' price changes. First, the price in the market is set by the leader, followed by small firms and companies. They change their prices when the leaders do.

• The method of determining the price according to the level of competitiveness

If a company has developed a new drug according to certain parameters, better or worse than similar indicators of its main market competitor, then it can set the price taking into account the integral indicator of competitiveness:

$$P = P_{\text{base}} I$$

where

 $P_{\mbox{\tiny base-}}$  is the price of the basic medicine a competitor;

I -is an integral indicator of the competitiveness of medicines

$$I = \frac{I_{f.p.}}{I_{e.p.}}$$

where

 $I_{f.p.}$  – index of functional parameters (quality index);

I \_\_\_\_ index of economic parameters (consumer price index).

It is advisable to analyze the price determined by this method, taking into account the costs of production and sale of medicines, as well as market demand.

#### • The method of price determination based on bidding (tender pricing)

The buyer (customer) announces a tender for the supply of pharmaceutical goods. After receiving and comparing offers, the customer signs a contract with the manufacturer who can provide the most favorable conditions. To organize the bidding, the customer creates a tender committee, which prepares documentation, conducts bidding, analyzes and evaluates proposals - offers submitted by bidders.

The buyer (customer) announces a tender for the supply of pharmaceutical goods. After receiving and comparing offers, the customer signs a contract with the manufacturer who can provide the most favorable conditions. To organize the bidding, the customer creates a tender committee, which prepares documentation, conducts bidding, analyzes and evaluates proposals - offers submitted by bidders.

During the auction, each competing firm sets its own bid price. The higher the price, the less likely you are to receive an order and vice versa. By multiplying the profit included in a particular price option by the probability of receiving an order at that price, you can get the so-called estimate of the expected profit. According to decision theory, you need to ask for the price that will contribute to obtaining the highest expected profit.

The legislative framework of Ukraine provides for tendering in the case of procurement of medicines over 10 thousand tons. UAH. budgetary and extrabudgetary funds. The method is widely used in the supply of drugs of specific groups, primarily vital (insulin and other antidiabetic drugs).

## Adjusting the price to the market

The pricing process for a firm's products does not end with setting the final price. Due to the fact that the market and the level of sales of goods are influenced by many constantly changing factors (political instability, general economic factors, depletion of natural resources, demographic situation, etc.), the company faces the need to manage prices.

Price management is carried out by making appropriate changes to price lists, clauses to contracts, compensations.

In pricing practice, a system of trade discounts, margins and offsets is widely used.

According to experts, there are about <u>40 types of price</u> discounts.

The most common of them are:

- Simple discount;
- discount for accelerating payment;
- discount for the volume of purchased goods;
- cumulative discount (discount for turnover);
- Dealer Discount:
- Retailer Discount;
- Seasonal discount;
- Functional discount:
- Discount on new product;
- Quality Discount;

- Club Discount:
- Export Discount/

When setting discounts, you must be guided by the following principles:

- 1. The application of the discount should provide a positive effect, which can be expressed both in an increase in the customer base and in the achievement of positive economic indicators.
- 2. The amount of the discount provided should take into account both the interests of the buyer and the interests of the seller
- 3. When developing a system of discounts, the size of the initially set (base) price should be taken into account, which is initially recommended to be set as high as possible.
- 4. When setting discounts, the nature of the elasticity of demand for the products sold should be taken into account, since a decrease in prices cannot always lead to an increase in sales, since many goods belong to the group of inelastic.

#### PRACTICAL ASSIGNMENTS

*Task 1*. Compile in the form of a diagram the algorithm for setting the price of the product (by stages).

**Task 2**. Indicate the types of pricing strategies known to you, give them a brief description. Present the answer *tab*. 6.1.

*Tab 6.1* 

## Pricing strategies, their characteristics

Type of product	Pricing strategies	Characteristic
1	2	3
New drug		
A drug that is not a novelty		

*Task 3*. Set the contract price, taking into account inflation, for the medicinal product under the condition (*look. tab. 6.2*).

*Tab* 6.2

## Calculation of the contract price taking into account inflation

Indicators	LERKAMEN tab. 20 mg №14	Calendula tincture 50 ml.	МІКОСИСТ caps. 50 mg №7
1	2	3	4
The basic price of the drug including	51,50 uah.	2,6 uah.	75,00 uah.
VAT(Value added tax)			
Inflation index	1,3	1,1	1,2

Increase in the inflation index,%	30	10	20
Contractual coefficient	0,6	0,5	0,5
Contract price (formula)			
-			

## After completing the practical assignment, the student should acquire practical skills and abilities:

- to develop an algorithm for setting the price of a product;
- choose an appropriate price strategy;
- to determine the possible retail price of the drug by various methods;
- to determine the contractual price of the drug taking into account inflation.

#### **SELF-CHECK TESTS**

1

Decisions made in the field of drug pricing are influenced by internal and external factors. Internal factors include:

- A. Life cycle stages
- B. Competitors
- C. Participants of sales channels
- D. State regulation
- E. Consumers

2

When setting prices, the pharmaceutical company takes into account internal and external factors. Which of the following belongs to external factors?

- A. State regulation of pricing
- B. The company's marketing goals
- C. Marketing strategy of the company
- D. Production costs
- E. Stage of the life cycle of a medicinal product

3

Medicines included in the National List of Essential Medicines have arrived at the pharmacy from the supplier. What kind of prices are set for these drugs?

- A. Regulated price
- B. Negotiable price
- C. Indicative price
- D. Free price
- E. Fixed price

4

Pharmaceutical company "Pfizer" strives to offer the market the best quality product at a high price, which should cover the costs of research and development

and production of high-quality products. Despite the high price, the product finds its buyers. What pricing objectives does the firm set?

- A. Gaining leadership in terms of product quality
- B. Ensuring the survival of the firm
- C. Preserving the status quo
- D. Increasing market share
- E. Increasing the assortment of the company

5

The pharmaceutical company reduced the price of the drug in the conditions of increased competition and a decrease in the demand for drugs. What is the purpose of pricing for this company?

- A. Ensuring the survival of the enterprise
- B. Profit maximization
- C. Formation of the image as a producer of high-quality drugs
- D. Gaining leadership in quality

6

Which of the following factors is the most influential on the price policy of the enterprise?

- A. Competition
- B. Production costs
- C. Purchasing power of consumers
- D. The price of the analogue drug
- E. Demand for medicine

7

The pharmaceutical company-manufacturer sets the price of the drug, taking into account its cost price and the markup to the cost price. What pricing model does this method belong to?

- A. Cost model
- B. Competitive model
- C. A model based on market demand
- D. A supply-based model
- E. Breakeven models

Q

A pharmaceutical firm can use different pricing strategies. When using which pricing strategy, high prestige prices are set for original drugs that have no analogues?

- A. Skimming strategy
- B. Strategy of discriminatory prices
- C. Strategy of deep market penetration
- D. Strategy of "discounted prices"

9

A pharmaceutical company plans to release a new medicinal substance. What pricing method will allow you to determine the minimum acceptable price and the production volume necessary to make a profit?

- A. The break-even method
- B. Sealed envelope method
- C. Expenditure method
- D. Price determination with orientation to demand
- E. Determination of price with orientation to competitors

10

A domestic pharmaceutical company introduces a generic drug to the market at a price significantly lower than the price of foreign analogues. What pricing strategy does the domestic manufacturer use?

- A. "Deep market penetration"
- B. «Following the Leader»
- C. «Removing the cream»
- D. Price discrimination
- E. The «sealed envelope» method

#### TOPIC 7

## SALES ACTIVITY OF PHARMACEUTICAL ENTERPRISES

**Students should know:** basic concepts of "sales activity", "distribution channel", "intermediary", etc., peculiarities of the organization of sales activities of pharmaceutical enterprises

**Basic terms and concepts**: sales activity, distribution channel, level and width of the distribution channel, traditional and non-traditional distribution system, dependent and independent intermediaries, logistics

#### **QUESTIONS**

- 1. Characteristics of sales activities of pharmaceutical enterprises.
- 2. Channels of distribution of goods and their characteristics.
- 3. Characteristics of the structure of the traditional distribution system. characteristics of intermediaries.
- 4. Characteristics of unconventional distribution channels.
- 5. Selection of the optimal distribution channel. Basic strategies for the distribution of drugs.
- 6. Concepts and types of pharmaceutical logistics.
- 7. Support of commodity stocks at the pharmaceutical enterprise.

## **SELF-CHECK QUESTIONS**

- 1. Concepts of "sales", "sales activity".
- 2. Marketing activities of pharmaceutical enterprises .
- 3. The structure of the traditional distribution system.
- 4. Structure of non-traditional distribution system.
- 5. Levels of product movement channels.
- 6. The length of the sales channel.
- 7. Width of the sales channel.
- 8. Characteristics of intermediaries operating in the sales system.
- 9. Choosing the optimal distribution channel.
- 10. Selection of subjects of the drug distribution channel
- 11. Organization of control over the drug distribution channel.
- 12. Motivation and evaluation of the activities of the participants of the drug sales channel
- 13. Basic strategies for the distribution of drugs.
- 14. Concept of pharmaceutical logistics
- 15. Types of pharmaceutical logistics
- 16. Basics of sales pharmaceutical logistics
- 17. Methods of assessing the optimality of drug stocks.

#### **OVERVIEW**

From the standpoint of the current state of the pharmaceutical sector and the pharmaceutical market of Ukraine with the characteristics of the structural elements of the marketing of pharmaceutical products, their functions and activities, the characteristics of wholesale and retail trade of medicines and pharmaceutical logistics.

The main content of the principle of marketing is customer satisfaction, provides not only the production of necessary goods, but also to bring these products to consumers convenient way, in a convenient place and at a convenient time. This contributes to the achievement of sales.

Place or sales:

•how, when and where we deliver our goods and services depending on consumer demand.

*In other words*, system of distribution and movement of goods.

Product distribution:

• This is an activity directly related to the physical movement of manufactured goods from the producer to the consumer and the transfer of ownership of these goods to him.

Product circulation (distribution) (in addition to the direct distribution of goods or services) includes:

- management decisions on distribution channels;
- sales logistics;
- channel activity management;
- retail trade:
- direct act of sale (purchase);
- consumer support

Sales of pharmaceutical organizations - this is a set of measures taken by a pharmaceutical company from the moment the drug enters the consumer market or the market of consumer organizations until the moment when the consumer purchases it.

Sales activities (functional aspect) - a process consisting of planning the volume of sales of medicines, taking into account the planned level of profit, searching and selecting counterparties, carrying out exchange processes with them, setting prices in accordance with the quality of the medicine and the intensity of demand for it, identifying and using factors that improve the promotion of the medicine on the market

Participants in the distribution system perform the following functions:

• collecting information for marketing research;

- dissemination of positive information about the product (participation in the communication process);
- establishing and maintaining connections with potential consumers;
- adaptation of goods to consumer needs (sorting, packaging);
- formation of product range;
- organization of goods movement: transportation and storage of goods;
- conducting business negotiations with consumers regarding price levels and other conditions before drawing up a supply agreement;
- partial or full financing of the costs of operating the channel;
- lending;
- taking on risks (partial or complete) from the functioning of channels and sales of goods.

The existence and development of marketing activities caused by a number of causes:

- 1. The need is distribution system which brings the goods to the consumer, making it more accessible.
- 2. Fighting for the buyer's money is expanding distribution network, bringing it closer to the consumer and creating maximum comfort for him during and after the purchase, the company reaches a certain competitive advantage.
- 3. Rationalization of production processes associated with the fact that the distribution network takes over part of the finishing operations of the production process (sorting, packing and wrapping, etc.), which efficiently perform on the stage of pre-sales service.
- 4. Problems of effectiveness of market behaviour and development firm. This means that the study of consumer behaviour, their relationship to the product in order to further meet the needs of efficient conduct where customers directly confronted with the goods, i.e. in system sales.

**Distribution** an activity of company to plan, organize and control the physical movement of materials and finished products from their place of manufacture to point of use in order to meet consumer needs and to obtain firm profits. It is carried in the *distribution policy*.

Main modern trends in the development of the pharmaceutical distribution network:

- creation of representative offices of pharmaceutical companies
- unification of sales channels
- providing target consumers: doctors, pharmacists, patients with reliable and complete information about medicines and the possibility of purchasing them

Representative office classification parameters:

• Representative offices of manufacturing enterprises (domestic, foreign)

- Representative offices of intermediary companies (domestic, foreign) Representation of pharmaceutical companies using the following principles:
- *territorial* the simplest way to structure the work. A representativer or representative office is assigned to a certain territory with exclusive service rights;
- *commodity* specialization of representative offices for certain groups of medicines:
- *consumer* specialization of the representative office's work with individual consumers (wholesale companies, pharmacies, medical institutions, patients).

**Distribution system structure** - this is a set of product promotion channels and intermediaries that the manufacturer uses to bring its goods to end consumers Functions of distribution are carried out through distribution channels.

**Distribution channel (distribution)** is a collection of firms or individuals that perform an intermediary function regarding the movement of goods and undertake or assist in the transfer of ownership of goods along the way from producer to consumer

this is a set of paths (route) for the promotion of goods from producer to consumer Marketing channels perform several functions that contribute to the successful implementation of marketing programs of the company. They are:

- 1. Reporting collecting and processing information obtained through market research and for planning and organization processes of distribution of goods.
- 2. Promotion the development and distribution by means of marketing communication of information about products to attract buyers.
- 3. Establish contacts and negotiations establishing and maintaining relationships with potential buyers, an agreement on prices, volumes and terms of delivery
- 4. Ordering the conclusion of contracts with other members of distribution channel to purchase products by manufacturer, monitor their implementation.
- 5. Adapt products to customer requirements production, sorting, packing and wrapping, assembling products, after sales service.
- 6. Physical movement of goods the organization of transportation and warehousing.
- 7. Financing search and distribution of the funds needed to cover the operating cost of the distribution channel.
- 8. Risk-taking the responsibility for all processes in the channel of distribution.

All functions can be conditionally grouped into three groups: related agreements; logistics; serving.

Given this, it should be noted that the choice of distribution channels is a difficult management decision, as the selected channels will directly affect on the effectiveness of all other solutions in the field of marketing.

The choice of distribution channel also depends on the costs and profits. If a company fully takes over the functions of marketing, then it is itself covers the costs involved, but all profits will belong to it. In the case of external channels both costs and benefits are distributed among all participants in a distribution channel.

Therefore, companies need to assess the potential benefits and choose the alternative.

Types of distribution channels:

- *Direct channels* associated with the movement of goods without the participation of intermediary organizations.
- *Indirect channels* associated with the movement of goods first from the manufacturer to the intermediary participant, and then from him to the consumer.
- *Mixed channels* combine the features of the first two distribution channels.

Depending on their functions and the number of intermediary distribution channels can be simple or complex level structure.

The structure of the distribution system is characterized by the following indicators:

- level
- length (extent)
- width (sales method.

The level of sales channel is any intermediary that performs a particular work on the approximation of the goods and property rights to it to the final consumer.

In the modern theory and practice of marketing channels differ:

- **zero**, or a direct marketing channel, consisting of producer and consumer, to whom he directly sells goods;
- **one level**, including a mediator. In consumer markets, it often acts as an intermediary retailer, and the goods for production purposes markets is a sales agent or broker;
- **two level** include two mediators. In the markets of consumer goods is a wholesale and retail traders, and in the markets goods for production purposes distributor and dealers;
- **three level** including the three mediators, respectively, between wholesale and retail traders may be small wholesale trader.

There are channels with a lot of levels, but they occur less frequently. In addition, manufacturers believe that the longer sales channel, the less ability to effectively control it.

With the structure of distribution channels are directly related to concepts such as length and width of the channel.

Sales channel length – is determined by the number of intermediaries through which the product passes from producer to consumer, or the length of the channel is determined by the number of intermediate levels present in it.

The length of the channel is characterized by a number of intermediate levels that make it up.

Channel width sales (sales method) determines the number of independent participants at each level of the channel (stage of product promotion).

*The channel width* is determined by the number of independent members on an individual level (step) value chain.

The decision on the length and width of the channel depends on the nature of the product and distribution channel usage.

Typically, the channels of capital goods are distinguished smaller number of intermediaries in general and in the value chain at every level than the distribution channels of consumer goods. Are also shorter and channels of distribution services, which due to their intangible nature, which requires direct contact of the consumer and service provider.

Selecting the number of intermediaries at each level of distribution channel is based on one of three approaches to determining the degree of intensity of use of the channel.

*Intensive distribution* – is provided for goods of daily demand and requires a large number of wholesalers and retailers. The purpose of the company is in finding wide market coverage and getting high profits by quickly selling the goods.

**Distribution of the rights of exclusivity** (exclusive) is when a limited number of wholesalers and retailers are granted the exclusive right to sell the goods within the firm's sales territories. This approach promotes responsible mediator, as well as an image in the eyes of the consumer product that allows you to make it higher margins and thus obtain a significant profit.

Selective distribution or targeted distribution — is the average between the previous two. In this case, the number of intermediaries involved more than one but less than the total number of available take the sale of goods. This allows us to establish of business relationship with specially selected intermediaries and expect from them efforts respect sales at a level above the average, to achieve the required coverage of the market with more stringent control and cost less than in the case of intensive marketing.

*Intermediary (intermediary firm)* this is a person or firm that stands between the producer and consumer of a product and facilitates its trade turnover.

The main function of the intermediary is to perform tasks for the effective placement of the product directly where it is available for sale to the consumer.

In the sales activities of producers use the services of various intermediaries who can be classified according to their relation to the sold goods

The first group consists of intermediaries, who are the owners of the goods. They are completely autonomous and independent from the manufacturer. Sell goods on their name and own expense. Profit and compensate their own costs by margins in the price of the goods. Representatives of this group of intermediaries are wholesalers and retailers, distributors, dealers, distributors.

**Dealer** - an intermediary who resells drugs supplied to him by a distributor, often in his own name and at his own expense.

The dealer's profit is the difference between the price at which he purchased the product and the selling price.

Dealer – is an independent intermediary specializing in the sale of durable goods in need of considerable after-sales service.

**Distributor** – is a company or person who performs mainly import operations and acts as a dealer under the contract on the basis of agreements with producers (sellers) and buyers of products. Distributor buys and sells goods on its own name and own expense, and is usually in the im-porting country

**Jober** - an intermediary who resells medicines purchased (purchased) from an importing company

**Retailer** – a legal or natural person who directly sells a certain amount of goods to the final consumer, which gets him in the property or from the wholesaler or the manufacturer.

The second group includes intermediaries who do not have right of ownership on goods which sold. This is a broker, commissionaire, consign-ees and wholesale agents.

Dependent Intermediaries do not claim ownership of goods, work for a commission for services performed

**Broker** – is an individual or legal person who takes part in the sale of goods, bringing buyer and seller, and receives from the executed agreement commission (brokerage). To Broker provides special powers to enter into an agreement under which he operates. He does not buy goods from his own name and does not accept responsibility for them. These operations are carried out on the commodity exchanges.

**Wholesaler agent** – is a mediator who works with the manufacturer for a specific agreement, and has operations at its expense and on its behalf, while he may

be granted the exclusive right of sale of goods firms in some regions. In other cases, agents work with restrictions (for example, on consignment basis), served by only one firm or individual customers. The amount of remuneration determines the principal agent, usually a percentage of the amount of the agreement.

**Commissionaire** – is an individual or legal person who has a warehouse and for a certain fee implements the goods in benefit and at the expense of the owner of the goods, but in his own name. The form of compensation commissionaire is a percentage from the amount of the operation or the difference between the price designated by the principal, and the sale price.

**Consignee** – differs from the commission that takes on the warehouse owner's goods and sells them in the name of the owner, but at their own expense. Remuneration received as far as sale of goods from the warehouse, depending on the type of consignment (simple, partially used and returned).

Except as stated above, we should mention other types of intermediaries.

*Sales representatives* – is legal persons that enter into agreements and do business with several companies. Remuneration sales representatives depend on the volume of sales.

Trade syndicates organized through the removing department form the structure of the firm.

*Trade houses* is big wholesale and retail firms that are engaged not only in trade and brokering, and investment and capital in production, per-form warehousing, insurance products, and organize retail and wholesale trade. Members of the trading houses are usually company-producers.

The main areas of distribution channel management is defining the objectives of sales, development of alternative options for the structure of distribution channels, selecting of channel members, their motivation, evaluation and monitoring activities of intermediaries, the settlement of conflicts.

The objectives of distribution policy of the enterprise may be the expansion of market reach, penetration into new market segments, increasing market share, sales, profits, etc.

In the formation of an effective distribution channel, in addition to meeting the conditions examined, the firm should consider the following factors:

- characteristics of end-users their numbers, concentration, frequency of purchases, demand for services, etc.;
- the possibility of the company its objectives, resources, expertise, competitiveness, the scale of production;
- characteristics of a product or service price, complexity, technical specifications, conditions of storage and operation, etc.;

- competition the number and concentration of competitors, the range of their products, their customers, the organization of markets;
- channels of distribution options depending on the structure of the functions, accessibility, legislation that restricts certain aspects of their organization.
- Among other things, it is advisable to take into account the requirements of target customers, who tend to focus on:
- the size of the consignment;
- the waiting time of the order;
- convenience of the location of the firm-intermediary;
- diversity of goods, the width of the range;
- the possibility of providing additional services.

Creating an effective sales channel needs a reasoned choice of specific mediators, since it affects the marketing activities of firms in the market and the implementation of business in general.

Therefore it is recommended:

- ensure that the chosen intermediary is not also a mediator of a competitor;
- under the same conditions to give preference to specialized intermediaries, as he has more experience in the sale of the goods;
- choose a well-known company that has an impeccable reputation in the market:
- identify sources of funding intermediary whether it provides loans and how it is the bank;
- establish the extent of equipment logistics intermediary, skill level of employees;
- enter into short-term trial agreement for mediation, which allows in practice to see the opportunities and responsibilities of business intermediary firm;
  - visit the intermediary company to ensure its reliability and competence;
  - increase the number of intermediaries, in order to reduce business risk;
- take into account the location of the firm, intermediary, his field of expertise, marketing concept and the program;
  - assess the scope of a particular product market.

For the qualitative performance of their duties intermediary's plays an important part of their motivation is based on the choice of means appropriate to their expectations and effective for the purposes of the manufacturer.

Motivational effects may be based on three variants of the formation of relations between the producer and the intermediary.

Producer cooperative with the mediator, suggesting the use of a producer of powerful economic incentives, in particular, greater profit margins, the conclusion of agreements on specific conditions, cash bonuses, joint marketing campaigns, etc.

Partnership, when the manufacturer clearly defines the tasks intermediary (e.g., the degree of market coverage, quality service and maintenance, participation in the

development of marketing, gathering and providing marketing information), on the results of which, the amount of compensation. Partnerships motivating factors contribute to the formation of long-term cooperative relationships with the manufacturer's intermediaries and other participants in the distribution channel.

Planning for distribution when the manufacturer organizes special department for planning work with intermediaries, whose function is to identify their needs, develop programs to promote trade in order to improve its efficiency, determination, together with the intermediaries, commercial purposes, the required level of inventory, sales training requirements personnel, etc.

Each producer, depending on their goals, develops their own system of evaluation criteria of the participants in a distribution channel based on its findings on such indicators: profitability; volume of sales in cash and kind; the average level of stocks; execution time of delivery of goods to customers; attracting new customers; the level of customer service; participation in promotional programs; training and education personnel; the quality and reliability of market information provided by the manufacturer, etc.

These factors are incorporated in the so-called the concept of "3 C":

- costs the costs of distribution;
- control control over the distribution channel;
- coverage coverage of the market.

The development of market relations and the associated improvement of market infrastructure, systems and methods for distribution of products have expanded the number of factors that determine the efficiency of the distribution channels.

The modern version is known as the concept of "6 C":

- costs the costs of distribution;
- control control over the distribution channel;
- coverage coverage of the market;
- capital investments required for the formation of the channel distribution;
- character the character of the channel, its product line with the requirements of producers and consumers;
- continuity the stability of the channel (including VA Finance), focus on long-term cooperation.

Depending on the combination of methods and elements of the marketing of differentiate simple and complex distribution system

A simple system provides presence a supply chain, usually of two parts: the producer and consumer, that is, the virtual absence of special marketing organizations.

Complicated system is represented by multi-level units, which include its own distribution network, dependent and independent sales brokers, wholesalers and retailers.

It is often this kind of sophisticated marketing system as a dual system of distribution channels, where the manufacturer at the same market, using two independent or related sales channel.

Considered distribution system based on the use of *traditional* channels of different level structure, width and length. All participants in a distribution system are independent and not subject to another, are aimed at maximize profits only on its stage, but not in the system of distribution in general.

Relatively new, but quite common in developed countries are the so-called vertical distribution system or the vertical marketing system (VMS). From the traditional distribution system the VMS are different in that their members: the manufacturer of products, one or more wholesalers, one or more retailers – pursuing the same goals and interests and act as a single system. In this case, one member of the system the owner of the other, or provide them with trading privileges, or has the advantages that ensure their cooperation. VMS emerged as a means of controlling the behavior of the channel and resolve conflicts between its members, who are pursuing their own goals.

Currently, the VMS cover more than 64% of the total market. Now there are three main types of the VMS/

In parallel with the development of VMS are developing horizontal and multichannel marketing system.

*Corporate (integrated) VMS.* Within the corporate VMS successive stages of production and distribution are in ownership of a single of a member of the system which, as a rule, is a manufacturer of products. Such vertical integration often used by companies seeking greater control over distribution channels.

This system is able to effectively compete with other markets, to adapt quickly to market changes, saving the cost of production and marketing.

Contract VMS consist of independent firms which are linked by contract and coordinate their programs of activities to achieve greater overall economy or business results than would be possible to do it alone. At present it is the most common system.

They are of three types:

1. **Voluntary associations** of retailers under the aegis of wholesalers. Traders form a voluntary association of independent retailers, In the interest of their benefits and discounts to the fastest selling products to consumers. At the same wholesaler is developing a program that provides for the standardization of trade practices of retailers and ensure efficiency of procurement.

2. *Cooperative retailers*. Retailers unite and create a company that provides procurement, and possibly the production of goods, organize joint advertising.

The resulting profit is distributed to the members in proportion

Organization of holders trading privileges (franchise), which, in turn, exist in such forms:

- system of retail holders of the privilege under the auspices of the manufacturer. The manufacturer creates a network of dealers or independent dealers, which provides a license to sell their products;
- system of wholesalers the holders of privileges under the auspices of the manufacturer. The manufacturer provides wholesaler's license to trade his goods;
- system of retail holders of the privilege under the auspices of the firm to provide services. The company services form a comprehensive system to inform consumers about their services. Typically, these pyramid companies have their own service providers and customers.

Controlled VMS carry out coordination of the activities of successive stages of production and distribution of products with the advantages of one of the participants in the system, which in this case is not its owner. He is able to obtain from its sales network of exhibitions, fairs, presentations, provision of retail space in order to further strengthen its position. The participant's channels are endowed with initiative and independence.

**Horizontal marketing system** (HMS) is an association of two or more companies at the same level of their resources and efforts for the joint development of marketing opportunities. The cooperation may be temporary or permanent as well can go towards the creation of a separate joint venture.

**Multi-channel marketing system** (MMS) is creating in order to more comprehensive coverage of market specific products.

Considered distribution channels include the use of three basic methods of distribution:

- direct or immediate, when the manufacturer of products does not resort to the services of intermediaries and passes the goods directly to consumers;
- indirectly, when the marketing of their products manufacturer uses the services of various kinds of intermediaries;
- combined, or mixed, when the intermediary is an organization with mixed capital, i.e. used as a tool manufacturer, and other independent companies.

### **Fundamentals of sales logistics**

Need to apply logistics in the economy explained for several reasons, chief among which are: the development of competition caused by the transition from the "seller's market" to a "buyer's market". At present, logistics is considered as a science and as an economic activity.

Logistics as the science is an interdisciplinary research area directly related to the search for new opportunities to enhance the efficiency of material flows.

Logistics as the direction of economic activity is in the management of material flows in production and circulation.

This allows the use of logistics: reduce stocks on all way movement of material flow; reduce travel time of goods throughout the supply chain; reduce transport costs; reduce the cost of manual labor and associated costs for the operation of the cargo.

A wide range of logistics functions in economic activity leads to the feasibility of their division into three groups: basic, key and support.

#### Six rules of logistics:

- Goods the required product
- Quality the right quality
- Quantity in the right quantity
- Time must be delivered at the right time
- Place in the right place
- Costs with minimal costs

To basic logistics functions include: supply; production; sales.

The key logistics functions are: maintenance of standards of customer service; management of procurement; transportation; management of stocks; management procedures of orders; management of production processes; pricing; physical distribution.

Supporting logistics functions include: warehousing; materials handling; protective package; ensuring the return of the goods; providing spare parts and service; collecting returnable waste; Information and computer support.

Types of logistics:

- *procurement logistics* associated with providing production with materials and trade with goods;
- *production* aimed at improving the organization and efficiency of the work process;

sales, it is also called

• marketing or distribution ensures efficient organization of product distribution. It covers the analysis, planning, organization, integration and control of all functional subsystems of a pharmaceutical enterprise related to the flow of medicines from manufacturer to consumer, and the necessary channels for their distribution

Logistics of stocks. The concept of safety permeates every sphere of material production and is a component of material flow.

At the location of stocks are classified as:

- *production*, which are formed in enterprises of all branches of material production and are intended for industrial use in order to ensure its continuity;
- *commodities which are in stock of finished goods* manufacturers, organizations, and in the channels of the circulation. They are necessary for the uninterrupted supply of consumers with material resources.

Both types of stocks, in turn, are divided into:

- *current stocks* to ensure continuity of production or sales process between successive deliveries;
- *insurance stocks* are designed to ensure continuous production of goods or materials or sales process in the event of unforeseen circumstances: variations in the frequency and magnitude of the planned party supplies, changes in the intensity of consumption, delays in the supply path;
- *seasonal* stocks are formed by the seasonal nature of production, consumption and transportation.

In addition, there are the following types of material stocks:

- passing the remnants of the material resources at the end of the reporting period;
- *preparation* (*buffer*) is part of industrial stocks that require additional training before they are used in the production process;
- *illiquid* it is not used for long-term production or commodity stocks, generated as a result of deterioration of goods during storage and obsolescence:
- *stocks in a way* this is stocks, which are at the time of registration in the course of transportation.

#### PRACTICAL ASSIGNMENTS

Task 1. Schematically present models of drug distribution strategies.

**Task 2.** Provide a comparative description of the agent, consignor and distributor, using the following indicators (*tab.* 7.1).

*Tab. 7.1* 

Characteristics of pharmaceutical product intermediaries

characteristics of pharmacteristic product miteriation					
№	Indicators	Agent	Distributor	Consignor	
1	2	3	4	5	
1.	Ownership of goods				
2.	Award form				
3.	Participation in advertising				
4.	Availability of pharmacies				
5.	Formation of price policy				
6.	Ability to attract agents				

After completing the practical assignment, the student should acquire practical skills and abilities:

- to determine and establish the optimal model for the distribution of medicinal products;
- set the levels, width and length of the distribution system;
- distinguish and establish dependent and independent intermediaries.

#### **SELF-CHECK TESTS**

1

The firm's activities in planning, organization and control over the physical movement of materials and finished products from the place of their production to the place of their use in order to satisfy the needs of consumers and benefit themselves, this:

- A. Sales
- B. Supply
- C. Demand
- D. Advertising
- E. Management

2

In order to organize a rational sales system, the manufacturing company uses various distribution channels. What does the term "distribution channel" mean»?

- A. A set of firms that perform intermediary functions
- B. The method of distribution of advertising
- C. The method of transporting goods
- D. All answers are correct
- E. There is no correct answer

3

The pharmaceutical manufacturer selects intermediaries to bring its medicines to the consumer. What is meant by the number of intermediaries through which medicinal products pass on the way from the manufacturer to the consumer?

- A. The length of the distribution channel
- B. Combined distribution
- C. The structure of the distribution channel
- D. The width of the distribution channel
- E. Echelon distribution

4

The Elema pharmaceutical company has created its own branded pharmacy. In this case, it uses a distribution channel:

- A. Zero level
- B. First level
- C. Second level

- D. Third level
- E. Fourth level

5

The manufacturing company plans to sell the new drug through wholesale pharmaceutical companies. What type of distribution channel is planned to be used?

- A. Two-level
- B. One-level
- C. Direct marketing
- D. Three-level

6

In order to cover a wide market, obtain high profits through mass sales and the convenience of the place of purchase of medicines for the consumer, the pharmaceutical manufacturer cooperates with numerous intermediaries. What type of distribution is this characteristic of?

- A. Intensive distribution
- B. Exclusive distribution
- C. Echelon distribution
- D. Combined distribution
- E. Selective distribution

7

The Ukrainian state production enterprise "Izotop" is the only supplier of radiopharmaceutical medicinal products. This type of distribution is characteristic of these drugs:

- A. Exclusive
- B. Selective
- C. Intense
- D. Selective
- E. Mass

8

There is a group of independent intermediaries working on the regional market who sell medicinal products on their own behalf and at their own expense. Such intermediaries are called:

- A. Dealers
- B. Brokers
- C. Commissioners
- D. Agents
- E. Consignors

9

The manufacturing company plans to sell the new medicine through branded pharmacies. What drug distribution strategy will be used?

- A. Straight
- B. Echeloned
- C. Flexible
- D. Horizontal integration
- E. Vertical integration

#### 10

A pharmaceutical manufacturer is the owner of a wholesale pharmaceutical company and a retail network through which it sells medicinal products. Indicate the type of pharmaceutical marketing system that was created:

- A. Corporate vertical
- B. Contractual vertical
- C. Horizontal
- D. Administrative vertical
- E. Multi-channel

#### **TOPIC 8**

# SYSTEM OF MARKETING COMMUNICATIONS. PROMOTION OF MEDICINES ON THE MARKET

**Students should know:** the structure of the marketing communications system, the goals and objectives of product promotion on the market, the characteristics of the components of the marketing communications system

**Basic terms and concepts**: marketing communications system, FDSP system (formation of demand and stimulation of sales), sales promotion, personal selling, advertising, "Public Relations", merchandising, fairs and exhibitions, etc.

## **QUESTIONS**

- 1. System of marketing communications of a pharmaceutical enterprise.
- 2. Characteristics of the main elements of the "promotion complex" of goods and services.
- 3. Stimulation of sales of pharmaceutical products in the process of marketing activities.
- 4. Personal selling as an element of marketing communication.
- 5. Merchandising: basic provisions, principles. Merchandising in pharmacies.
- 6. Appointment of fairs and exhibitions on the market of medicinal products

## SELF-CHECK QUESTIONS

- 1. The structure of the marketing communications complex.
- 2. FDSP system (formation of demand and stimulation of sales).
- 3. Characteristics of the main sales promotion measures.
- 4. Sales promotion measures aimed at consumers.
- 5. Sales promotion measures aimed at intermediaries.
- 6. Sales promotion measures aimed at own sales staff.
- 7. Basic product promotion strategies.
- 8. Personal selling as an element of marketing communication (objectives, functions, subjects, forms and principles of work)
- 9. Marketing approaches to defining the term "merchandising".
- 10. Basic provisions and principles of merchandising.
- 11. Merchandising in pharmacies, its main purpose.
- 12. Organization of fairs on the pharmaceutical market.
- 13. Preparation of exhibitions of goods and services on the market

#### **OVERVIEW**

Along with the tasks of research market, consumer, commercial, pricing and marketing policy marketing involves active actions of producers and wholesale

intermediaries to form of demand for goods and sales promotion, in other words to implement the policy of promotion.

Promotion is the creation and support term relations between the enterprise and the market in order to activate selling of goods and creating a positive image through information, persuasion and reminders about their activities.

Promotion policy is carried out in order to increase sales, enhance their efficiency and overall profitability of business.

Last years along with the increasing role of marketing has increased the role of marketing communications that allow for transmission of messages to consumers in order to create attractive products and Services Company for the target audience.

The main promotion functions are:

- creating an image of the prestige of the company, its products and services;
- informing about consumer parameters of goods and services;
- ensuring awareness of new products or services;
- maintaining the popularity of existing products;
- changing the production method is losing its position; increasing the enthusiasm of distribution channel participants;
- informing consumers about places where products are sold and sales; justification of prices of goods and services;
- providing after-sales service for products.

The major elements of promoting complex or a complex of marketing communications (also known as integrated marketing communications "marketing mix", the communications mix) are: advertising; the means of sales promotion; direct or personal selling; public relations (pr); exhibitions and fairs; branding; trademark, trade style, packaging; advertising in local sales and merchandising; service policy; direct marketing; work with the media and others.

The elements of marketing communications are presented in slide.

As a rule there are four main components of the above list: advertising, personal selling, public relations and sales promotion.

Marketing policy communications is promising course of action which aims to ensure interaction with all subjects of the marketing system to meet the needs of customers and profit.

Effectiveness of marketing communications can only be achieved through integrated use of all of them (why they are called integrated), which is achieved by management.

Management of the promotion or marketing communications is a complex of coordination of various elements of promotion; setting goals which might to be achieved through the use of these elements, estimating costs, sufficient for achieve

these objectives, the development of special programs, evaluation of work and taking corrective action if the results are not consistent with the purposes.

Management of marketing communications includes functions of planning, organization, motivation of participants to promote and monitor the effectiveness of the measures.

During *planning* a marketing communications communicator (company, informant) must:

- 1. Define the purpose of complex of marketing communications
- 2. Identify their target audience
- 3. Determine the feedback
- 4. Select an appeal
- 5. Choose the tools of dissemination of information
- 6. Select the properties which characterize the source of information
- 7. Collect the information received through the feedback
- 8. Calculate the budget.

The initial stage of formation of complex of marketing communication is to define its purposes. These include the formation of demand, increase sales, improve the image of the company and its goods, the provision of market penetration, sales promotion, etc.

Proved that all means of marketing communication at the same time should try to achieve their goals and cause some action (such as a second or first trial).

The structure and nature of the use of marketing communications depend on such factors:

- 1. Goals and objectives require different means of promotion.
- 2. Type of product or market is a property of the goods that affect on the choice of means, the target audience, cost, and size, the nature of the segment or niche market.
- 3. The nature of product promotion strategy: strategy of pushing; strategy to pull.

The strategy of pushing the product involves the use of sales staff and promotion of the sphere of trade to push the product through the channels of commodity promotion. Producer is focusing on how to get the wholesale and retail firms to purchase his goods. In this case, the set of elements dominated by promoting personal selling and sales promotion activities targeted at mediators.

The strategy of attracting customers (pull strategy) to the product provides the high cost of advertising and promotion of consumers in order to create demand from their side. With this approach, the consumer during the promotion acquainted with the product and then turns them over to the retail network, which in turn orders the goods from distributors, or directly from the manufacturer.

Advertising is the best tool for the business enterprise in an attempt to influence the behavior of consumers draw their attention to the production company, to create a positive image of the company to show it to the public good.

Advertising appears in four roles: marketing, communication, economic and social.

The marketing role consists in influence on a target market through each of the elements of marketing, because it includes a mechanism for the transfer of customer information, in turn, advertising is a component of marketing communications.

The communicative role is that advertising is a form of mass communication. It transmits various types of marketing information to achieve understanding between buyers and sellers in the market.

On economic role of the system, there are two views concerning the impact of advertising on the economy. From the position of the first (school market power) advertising it is the communicative tools of persuasion used by market professionals to distract consumers from the price, in terms of the second (school market competition) advertising is seen as a source of information, which increases the sensitivity of consumers to price and stimulate competition.

At the enterprise level economic or commercial role of advertising appears to increase the sales of goods or profit.

The social role of advertising:

- 1. Advertising informs about the new and improved products
- 2. Facilitates comparison of products, enabling the buyer to make a decision on the purchase
- 3. Advertising has an impact on people
- 4. Development of advertising is to some extent an indicator of social development.

Advertising can be viewed as a form of communication that attempts to translate the quality of goods and services on the language of consumers.

Advertising is tool convincing information about a product or company, the commercial promotion of consumer goods and the good qualities of the company, the tool that prepares an active and potential customer to purchase.

Or advertising it is a paid, non-personalized communication is carried out by an identified sponsor in the media to persuade (to something) or affect (somehow) to the audience.

Advertising is particularly important in the highly competitive environment. Almost all sectors of the economy, no company or enterprise cannot do in one way or another without advertising.

Sales promotion is a combination of techniques used throughout the product life cycle for the three participants in the market (consumer, wholesaler, dealer), for short-term increase in sales and increase the number of new customers.

Sales promotion in contrast to other means of marketing communications, you can quickly affect on the supply and demand immediate change consumer behavior.

The choice depends on the purpose of promoting the object of the upcoming impact, i.e. the target audience. Thus, the objectives of stimulating consumers with the highest importance, are increasing the number of customers, and increase the quantity of goods purchased by the same buyer.

To tools of sales promotion for buyers include:

- 1. Financial
- 2. The credit
- 3. Distribution or delivery free samples (sampling)
- 4. Premium sales, coupons
- 5. Competitions and lotteries among buyers
- 6. The use of packaging
- 7. An expanded sales campaigns of goods
- 8. Service policy.

The most important tools for promoting markets are financial, in particular, in the world used a large number of discounts: general (simple) complex, "Skonto" bonus, progressive, seasonal, export, special, hidden, confidential, and others

Sales promotion methods can be for:

- stimulating representatives
- stimulating intermediaries
- stimulating the company's own sales personnel
- stimulating buyers

Tool of sales promotion can be a guarantor of money back in case of dissatisfaction with the quality of the buyer or the consumer properties of goods.

Increased interest of customers helps the distribution or sending free samples. This method can be used to explore the views of consumers on the goods-samples.

Premium sale is set as a gift or a free delivery of additional quantities of the goods if the buyer becomes necessary for this quantity.

Often, to advertisements, or packaging of products are added coupons that give holders the right to purchase goods more cheaply. Coupons may also apply through the press or delivered to your home.

Distributions acquire various competitions and lotteries, which are held among customers.

Sales promotion contributes to the development of such packages, which can be used repeatedly.

Important means of sales promotion campaigns are expanded sales of goods, which are often organized in connection with the end of the season. In this case, with skillful marketing approach to the display of goods may be sold not only reduced-price products, but also those that are sold at regular prices.

Service policy provides for the maintenance of sold products and services are providing to the buyer with respect to different service delivery and transportation of goods.

Reseller (wholesale and retail) is a specific object of promoting, performing regulatory functions to promote the product. Aims to promote a product to give a certain image, to make it easily recognizable, to increase the amount of goods entering the retail (pharmacy) network; the greater interest of the intermediary in the active marketing of a particular brand of goods.

Means of stimulating mediators are:

- discount (with the large volume of the consignment for sales volumes and re-acquisition, the purchase of a new product);
- commodity credits, deferred payment;
- award in the form of prizes and competitions for professionals;
- commission payments for long-term effective contacts;
- organization of congresses, education and training of dealers;
- ad on-site sale of goods;
- aid in the design of retail space, the provision of intermediary free shop equipment and tools necessary for the implementation of certain goods, etc.

The objectives of stimulating sales staff (the seller) are:

- the transformation of an inert and indifferent to the product in a highly motivated seller enthusiast;
- an increase in sales of goods;
- promoting skills, exchange of experience between them.

To the tools stimulating sales applies: awards; awarding of gifts; additional leave; organization of competitions to award the winners of specialists; conferencing vendors; the allocation of permits for recreation and tourist travel; use of moral incentives (diplomas, congratulations, thanks).

Control and evaluation of sales promotion are carried out using different approaches: a preliminary assessment (including laboratory and market testing); the final assessment. In order to use the pre-assessment test plan, testing ways to encourage (including, for example, the choice of prizes for awarding winners) experiment, during which compares the various options for sales promotion, market testing of the real buyers in specific commercial enterprises or large-scale test program to stimulate sales in a representative region of the national market.

Final evaluation of the results of sales promotion can be carried out on such indicators:

- the number and percentage of purchases as a result of the action;
- the percentage of used coupons;
- the amount of the costs of promotion unit of the commodity;
- profits and profitability of the activities.

Public relations (PR) are a long-planned effort to create and maintain goodwill and mutual understanding between an organization and the public.

There is another definition, according to which the public relations – the art and science of analyzing trends, predicting their consequences, giving advice to management of organizations and programs of action in the interests of organizations and society.

The purpose of public relations is to establish two-way communication for the manifestation of the general ideas and common interests and mutual understanding based on truth, knowledge and full awareness.

The functions of the public relations include:

- establishment of mutual understanding and trust between the organization and society;
- creation of a "positive image" of the organization;
- preserve the reputation of the organization;
- creating a sense of responsibility in your organization and interest in the affairs of the enterprise;
- expanding the sphere of influence of the organization through appropriate promotion and advertising.

Any public relations activities consist of four distinct but interrelated parts:

- 1. Analysis, research and formulation of the problem.
- 2. Development program and budget activities.
- 3. Implementation of the program.
- 4. The study results, the evaluation and possible revision.

Personal selling is oral presentation of a product during a conversation with one or more buyers for the purpose of making a sale

Designed to ensure the formation of favorable ideas about the product and encourage potential buyers to consume it

Carried out through direct contact between the representative and the target audience.

Merchandising is a component of the marketing activities aimed at ensuring the most effective product promotion at the retail level, promotion of activities in the field of trade.

Or, merchandising – is marketing in the retail point, consisting of equipment for product placement, design and layout of promotional materials at point of purchase.

Common law defines merchandising favorable conditions of sale: products with a corresponding name of the respective prices must be available in the right place at the appropriate time and appropriate promotional support.

Fair - meaning a meeting of people at regular intervals for the exchange or sale of goods, has exactly the same meaning as the modern term (a periodic meeting for the sale of goods, often with a show or entertainment, at a place and time, determined by tradition).

Displaying and selling goods during the show is what makes the fair unique.

For the trade in medicines, fairs (as a means of communication) are not acceptable. However, it is widely used for cosmetic products, medical equipment, children's products and other parapharmaceutical.

Exhibition - a massive gathering of manufacturers to demonstrate their products to potential buyers.

Goals of the exhibition

- provision of exhibition and information services to legal entities and individuals engaged in entrepreneurial activities in the field of pharmaceutical business;
- deployment of advertising activities;
- informing potential consumers (doctors, the public) about new medicines, their areas of application and purchasing opportunities;
- exchange of commercial information with other regions, which contributes to the rationalization of economic relations;
- coverage of achievements and prospects for the release of new medicines, the use of new technologies.

#### PRACTICAL ASSIGNMENTS

**Task 1.** Specify the components of marketing communications in the form of a diagram.

**Task 2**. When forming a complex of marketing communications, a pharmaceutical company needs to take into account various factors. It is necessary to indicate these factors and characterize them. Present the results in *tab*. 8.1

 $Tab\ 8.1$  Factors influencing the formation of a complex of marketing communications

Characteristic
2

- **Task 3.** Present in the form of a scheme the main measures to stimulate the sale of medicinal products.
- **Task 4**. Display in the form of a scheme the functions, subjects, forms and principles of work of a representative of a pharmaceutical company in personal sales.
- **Task 5**. There are certain rules for placing goods on display shelves in the sales hall. Must be issued in the form of a tab. 8.2 by what criteria will you place drugs on the shelves of the showcase and give them a description.

Tab 8.2 Criteria for placing goods on display shelves in the sales hall

Criteria	Characteristic			
1	2			

**Task 6**. To develop an algorithm for the preparation of an exhibition of phytopreparations of the German phytoneering company "Bionorika". Present the stages of preparation in the form of a diagram.

# After completing the practical assignment, the student should acquire practical skills and abilities:

- to characterize the components of the marketing communications complex;
- to define and characterize the factors affecting the marketing communications system;
- determine the main sales promotion measures for various market subjects;
- characterize the main aspects of the work of a representative of the company for personal sales of medicines on the market;
- design shop windows of the pharmacy in accordance with merchandising rules;
- to prepare an exhibition of goods on the pharmaceutical market.

#### SELF-CHECK TESTS

1

The pharmaceutical company actively advertises the over-the-counter drug in the mass media: on television, radio, etc. Advertisements in newspapers, at the point of sale, and souvenirs are also used. What strategy does the firm use in this case?

- **✓** Attraction strategy
- ✓ Push strategy
- ✓ Undifferentiated marketing strategy
- ✓ Differentiated marketing strategy
- ✓ Concentrated marketing

2

Paid non-personalized communication carried out by an identified (known) sponsor, which uses mass media with the aim of influencing something or influencing the audience in some way, is:

- **✓** Advertising
- ✓ Trade mark
- ✓ Marketing
- ✓ Communications
- ✓ Offer

3

When developing an advertising appeal for a drug, a specialist in the marketing department of a pharmaceutical company complies with the requirements of current legislation. What information should be contained in the advertisement of medicinal products for end users?

- ✓ Recommendation regarding mandatory familiarization with the instructions for the drug.
- ✓ Information about the results of clinical trials.
- ✓ Recommendations of medical professionals and scientists.
- ✓ Comparison with other medicinal products.
- ✓ A warning about the deterioration of the health of consumers in case of refusal to take the drug

4

In the pharmacy during the month, discounts were established on medicinal products of the pharmaceutical company "Darnytsia". To which component of marketing communications do such measures belong?

- **✓** Sales promotion
- ✓ Propaganda
- ✓ Personal selling
- ✓ Merchandising
- ✓ PR activity

5

What means of sales promotion can be used by the management of the pharmacy chain in relation to its own employees?

- ✓ Awards
- ✓ Advertising at the point of sale
- ✓ Placement of pharmaceuticals in showcases and on shelves
- ✓ Coupons

6

Which component of the marketing communications system directs its activities to the formation of a positive image of the company?

- ✓ "Public Relations "
- ✓ Advertising
- ✓ Personal selling
- ✓ Sales logistics
- ✓ Merchandising

7

Merchandising is a set of communication measures aimed at increasing sales volumes by pharmacies. The main task of merchandising is:

- ✓ Fast sale of goods at the point of sale and organization of a general increase in sales volumes
- ✓ Reduced competition between analogue drugs
- ✓ Price reductions for unpopular drugs
- ✓ Balancing medicines and parapharmaceutical products in one pharmacy
- ✓ Increasing the range of competitive pharmaceutical products

8

Pharmacy workers placed advertising materials for the drug "Alteika Syrup" on the shelves near the cash register. Taking into account the rules of merchandising, in which zone the materials were placed?

- ✓ «Strong points»
- ✓ «Weak points"
- ✓ "Main places"
- ✓ "Auxiliary seats"
- ✓ "Dead Zone"

9

On television, mechanical contraceptives are periodically promoted among young people (without indications of specific brands). These measures are a type of which component of marketing communication?

- **✓** Publicity
- ✓ Advertisements
- ✓ Personal sales
- ✓ Sales promotion
- ✓ Sponsorship

10

Thanks to constant financial support of international sports games, the pharmaceutical company "Bon-Pharm" has become well-known in Ukraine and in foreign countries. What direction of activity does this situation describe??

- ✓ Publiciry
- ✓ Sponsorship
- ✓ Direct marketing
- ✓ Product promotion

Lobbying

#### **TOPIC 9**

#### INTERNATIONAL PHARMACEUTICAL MARKETING

**Student should know:** essence and features of international pharmaceutical marketing

**Basic terms and concepts:** international marketing, environment of international pharmaceutical marketing, forms of entry of enterprises to foreign markets, concepts of international pharmaceutical marketing, international marketing strategies

#### **QUESTIONS**

- 1. The essence and specifics of international pharmaceutical marketing.
- 2. Motives and stages of entry of pharmaceutical firms into the international market.
- 3. The environment of international marketing, its characteristics.
- 4. Forms of exit of pharmaceutical enterprises to foreign markets.
- 5. Concepts of international pharmaceutical marketing.
- 6. International marketing strategies.
- 7. Merchandise policy of international firms, its types.
- 8. Price policy in the system of international marketing.
- 9. Sales policy in the system of international marketing.
- 10. Promotion of medicines on the international market.

## **SELF-CHECK QUESTIONS**

- 1. The world pharmaceutical market, its characteristics.
- 2. The essence of international pharmaceutical marketing, its functions.
- 3. Features of international pharmaceutical marketing.
- 4. Motives of pharmaceutical firms entering the international market.
- 5. Stages of entry of pharmaceutical firms into the international market.
- 6. Characteristics of the international marketing environment (legal, political, economic, socio-cultural).
- 7. Certification system in the field of pharmacy.
- 8. Forms of exit of pharmaceutical enterprises to foreign markets (exports, joint ventures, direct investments).
- 9. Concepts of international pharmaceutical marketing.
- 10. Strategies for entering the international market.
- 11. Stages of international marketing strategy development.
- 12. Merchandise policy of international firms.
- 13. International marketing complex: standardization and adaptation.
- 14. Types of commodity policy (concentric, horizontal, conglomerate).
- 15. Price policy in the system of international marketing.
- 16. Types of prices in international trade.
- 17. Policy and methods of distribution of goods in international marketing.

- 18. Organization of sales logistics by international pharmaceutical companies.
- 19. Directions and approaches to the promotion of medicines on the international market.

#### **OVERVIEW**

A characteristic process of the modern world community is the development of international economic relations based, first of all, on the international division of labor. They represent objective, sustainable commercial relations between individual countries or groups of countries.

**The international market** is a set of markets of states that have specific characteristics determined by geographical, climatic, national, cultural, religious and political conditions.

The world pharmaceutical market is a set of interconnected national pharmaceutical markets of individual states, interacting and participating in the international division of labor, international trade and other forms of economic relations.

There are no significant differences between marketing on the domestic and foreign markets. They use the same principles and methods of marketing activity, however, the specifics and national characteristics of different countries must be strictly taken into account.

External economic activity is a necessary element of the modern economy. Expansion of international relations and integration between enterprises and countries is today a mandatory condition for recognition and occupation of a worthy place in the world community.

This is achieved by mastering the strategy and methods of **international marketing**, that is, international marketing is an important tool of the pharmaceutical company's activity on the world market.

*International marketing* - marketing of goods and services carried out by an enterprise outside the national borders of the state.

International pharmaceutical marketing is a managerial activity that is based on the coordination of marketing activities within the international economic environment and is aimed at creating demand and achieving the goals of a pharmaceutical enterprise through the maximum satisfaction of the needs of consumers of different countries with medicines and medical products.

International pharmaceutical marketing can be *bilateral* (*bilateral*) in nature, when a company, having mastered the pharmaceutical market of its country, enters the market of another country. However, *multilateral* systems are also often used. They can be quite flexible and are characterized by the fact that a pharmaceutical company, participating in one or many markets, is looking for an opportunity to enter another market or several markets at once.

The peculiarities and complexities of international marketing lie in the fact that many dynamic factors have to be taken into account: the political structure of countries; national currency systems; national legislation; economic policy of the state; language, culture, religion, customs and other features of the population.

The peculiarities and complexities of international marketing lie in the fact that many dynamic factors have to be taken into account: the political structure of countries; national currency systems; national legislation; economic policy of the state; language, culture, religion, customs and other features of the population.

The main types of marketing activities of a pharmaceutical company in the international market are:

- Comprehensive research of a specific pharmaceutical market;
- Drug development;
- Pricing;
- Sales of medicines;
- Promotion of drugs on the market.

The main *objectives* of international pharmaceutical marketing are:

- Searching for and identifying common and distinctive features in the needs of consumers in different countries by conducting market research in foreign pharmaceutical markets and their segments;
  - Meeting the needs of international consumers;
  - Successful competition in foreign pharmaceutical markets;
- Ensuring effective operations within the international environment (government restrictions and protectionism, cultural and economic peculiarities, financial constraints related to currency fluctuations and inflation, differences in marketing infrastructure in each pharmaceutical market).

The subjects of the international market and international marketing are firms, companies, enterprises, organizations, and individuals involved in foreign trade activities.

The motives for pharmaceutical companies to enter foreign markets are divided into two groups: *pro- and reactive*.

**Proactive motives** are external and internal incentives that push a pharmaceutical firm to take active steps based on the desire to use the company's existing competitive advantages or market opportunities. These include:

- Profit and growth.
- Ambitions and direction of marketers.
- A unique therapeutic agent.
- Opportunities in foreign pharmaceutical markets.
- Economies of scale in pharmaceutical production.
- Tax and other financial benefits.

**Reactive motives** - assume that the pharmaceutical firm takes a passive stance and only reacts to threats arising in its internal and external environment. These are:

- Unforeseen foreign orders.
- Competitive pressure.
- Insufficient size of the domestic pharmaceutical market or reduced activity in it.
- Excessive production capacity.
- The proximity of foreign consumers.
- Moral obsolescence of own drugs.

The process of a pharmaceutical company entering the international market follows a certain sequence:

- 1. Study of the international pharmaceutical marketing environment.
- 2. Deciding on the feasibility of entering the foreign pharmaceutical market.
- 3. Selection of promising pharmaceutical markets for entry.
- 4. Selection of methods and forms of entering the pharmaceutical markets.
- 5. Formation of the structure of the international marketing complex.
- 6. Organization of the marketing service.
- 7. Implementation of the marketing strategy and control of its results.

The implementation of a marketing plan can be hampered by unexpected competition and dramatic changes in the foreign market (revolutionary transformations, the outbreak of war, etc.). Therefore, a company should realistically evaluate the results of its marketing plans, analyze successes and options for goals and objectives, and, if necessary, adequately respond to changes in the international marketing environment

Entering the foreign market is impossible without a preliminary study of the international marketing environment, the entire set of factors that will determine the effective functioning of the company in another country.

The most important in analyzing the international marketing environment is the study of political, legal, economic, social and cultural conditions and circumstances prevailing in the potential market and the risks associated with it.

Before making a decision to engage in foreign economic activity (FEA), a company must study the international marketing environment, including *the legal system*.

There are 3 types of legal systems:

- Customary law system;
- The system of civilian;
- The system of theocratic law.

A company's participation in foreign economic activity involves many complex processes of international trade, which largely depends on the policies of individual countries.

State regulation of foreign economic relations is an important element of the legal environment. There are 2 areas of regulation:

- 1) protectionism, i.e. activities aimed at protecting domestic producers;
- 2) *free-trading*, i.e. free trade policy.

Most countries are characterized by a combination of these approaches. Therefore, when promoting goods to other national markets, a company may face certain trade restrictions: tariff quotas, embargoes, currency controls, and non-tariff trade barriers.

A customs tariff is a systematic list of fees that a government imposes on certain goods entering and leaving the country. It is used to increase government revenue or protect local producers.

**Non-tariff trade barriers** are restrictions on international trade that involve discrimination against offers from a particular country in the form of standards that discriminate against products from any country.

Each country has its own *political environment*. There are at least 5 factors to consider when deciding whether to establish business relations with a particular country:

- Ideology;
- Form of government;
- Political stability;
- Government bureaucracy;
- Attitudes towards foreign entrepreneurs.

Knowledge of **the economic environment of** each country is essential for successful entry into the market of individual countries, namely:

- Type of ownership;
- Methods of distribution and control of public resources;
- Industry structure;
- Income distribution system;
- Key problems of the economy.

The cultural environment of the target market plays an important role in planning the international marketing program of the company.

The cultural environment implies a set of basic values, beliefs, preferences and behaviors that are instilled in members of society by family and community organizations and include knowledge, art, morality, faith, laws, customs, and any abilities and skills.

The World Health Organization (WHO) plays an important role in regulating foreign economic activity in the field of pharmacy, which in 1992 at its Assembly approved the System of Quality Certification of Medicinal Products for International Trade.

*The quality certification system for medicinal* products covers the following activities:

- ➤ Licensing (registration) of medicines, manufacturers and wholesale suppliers;
- ➤ Production of medicines in accordance with the rules of good manufacturing practice (GMP);
- Management of quality control of medicines;
- ➤ Inspecting enterprises and assessing compliance with good manufacturing practices
- > Issuance of the necessary certificates;
- Investigation of complaints and reports from the relevant authorities on serious defects in the quality of medicines.

Participation in the Certification System and compliance with its provisions is a prerequisite for exporting medicinal products to other countries.

The process of a pharmaceutical company entering foreign markets and conducting international business there is called **internationalization**.

The most common *forms of a company's operations* in a foreign market are *exports, joint ventures, and direct investments*.

Many pharmaceutical firms start with exports, which means that the company enters a foreign market by sending medicines and selling them there with the help of international marketing intermediaries (*indirect exports*) or through its own branch, branch or representative office (*direct exports*).

Gradually, pharmaceutical firms may move to joint venture activities, i.e., *to combine enterprises* with foreign firms to produce or market certain medicines. There are several types of joint ventures:

- licensing;
- contract manufacturing;
- contract sales offices;
- contract management;
- joint marketing;
- joint ownership.

If a pharmaceutical company has gained some experience in international marketing and the foreign pharmaceutical market has sufficient capacity, it can start *direct investment*, which is carried out in two ways:

- investing entrepreneurial capital in the form of direct and portfolio investments:
- investment of borrowed capital.

The above forms of entering the foreign market are not mutually exclusive. Pharmaceutical companies that have decided on the feasibility of such an entry should evaluate alternative forms and choose the most attractive one in terms of costs and long-term stay in this market.

#### Concepts of international pharmaceutical marketing

The evolution of international pharmaceutical marketing can be described as the interconnection of 3 concepts of marketing activities abroad:

- 1. The concept of expanding the domestic pharmaceutical market. This concept is used by FFs seeking to increase sales of medicines intended for the domestic market by selling them abroad. The main motive for this behavior is to sell surplus drugs that have not found a buyer in the domestic market. All of the company's activities abroad are viewed as secondary and are in fact a continuation of domestic operations. Despite the fact that a pharmaceutical company abroad can make significant profits, its priority remains the domestic market;
- 2. The concept of a multi-domestic or differentiated pharmaceutical market. Realizing that foreign markets can differ significantly from each other, as well as the importance of operating abroad, the management of a pharmaceutical company turns to the concept of differentiated markets. In its activities, the company is guided by the fact that the conditions of sale and the need for generic drugs in different markets may be different. Therefore, in order to achieve success, a separate marketing plan is developed for each pharmaceutical market using a "country-by-country" approach;
- 3. is the concept of a global pharmaceutical market. It is used by firms whose market is the whole world. In this case, a pharmaceutical company develops innovative medicines that are equally desirable in different parts of the world. The global concept is based on the assertion that national pharmaceutical markets are

becoming increasingly similar, i.e., the same pathological changes in the state and functions of the human body can be normalized by using the same medicines. This results in the emergence of consumer groups (market segments) living in different countries, but demonstrating similar consumption patterns based on the same values, needs and behavior.

Each concept has its own style of behavior:

- 1) *ethnocentric* assumes that any activity in the international market is a continuation of domestic market operations;
- 2) *polycentric* meaning that there are significant differences in the functioning of foreign markets and it is necessary to work with them on an individual basis;
- 3) region-centered assumes and finds certain similarities between markets, and the company tries to act on them according to a common marketing program;
- 4) *geocentric* implies global experience and the creation of standardized globally used products and there is a desire to implement them through coordinated efforts in all markets.

#### **International marketing strategies**

An important aspect of a company's activities in foreign markets is the development of an optimal *marketing strategy*, i.e., the company's behavior that would ensure the achievement of a certain goal given the established opportunities within a specified period of time.

The process of developing an international marketing strategy includes several stages.

*The first stage* is the substantiation of the basic concept of the firm's marketing activities:

- situational analysis;
- research of the macro and micro environment of the company's functioning;
- defining goals, forming and optimizing strategic choices;
- specifying tactical tasks;
- periodic audit and review of marketing programs.

The second stage involves the use of various analytical approaches to the development of methods of expansion and the firm's activities in a foreign market. Expansion in the general sense is the expansion of the sphere of influence of associations of great powers, carried out by economic, military and political methods. Trade expansion is the expansion of the sphere of influence of firms (companies) of economically highly developed countries in the field of foreign trade aimed at strengthening the struggle for sales markets.

**The third stage** involves the formation and optimization of the peculiarities of the firm's behavior (functioning) in the international environment, which involves a certain level of adaptation of marketing programs to foreign conditions and requirements.

Choosing an appropriate strategy is a complex process based on the gradual acquisition of international marketing experience. As a result, an original integrated marketing strategy is formed that combines the company's policy on product, prices,

placement and promotion of goods, taking into account the strengths and weaknesses of the company and existing competition

An international marketing strategy can be *standardized*, i.e., common to both the domestic market and all foreign markets, or *adapted*, i.e., specialized for each individual market.

The strategy of standardized (global) marketing implies that a firm offers the same products sold on the national market for the foreign market without any changes and tries to attract the largest number of buyers in different countries using a standard marketing program.

The strategy of adapted marketing is based on taking into account the peculiarities of demand for goods in different markets and the firm's readiness to modify the goods and the program of measures for their promotion, taking into account the specifics of particular markets.

However, full adaptation also has certain financial and organizational disadvantages. Therefore, in the practice of international activity, as a rule, the so-called integrated marketing strategy is used. This is the most complex and flexible approach to the formation of an international marketing strategy, which ensures optimal compliance of the company's overall marketing activities with the conditions of a particular market.

The formation of an international marketing strategy should also take into account such an important aspect as the competitive environment of the world market and the determination of the company's competitive position in it. On this basis, there are several types of international marketing strategies:

- *Basic strategies* (global market share strategy, local market share strategy, global niche strategy);
- Confrontational strategies (flank attack, frontal attack, market encirclement, bypass strategy);
- Cooperative strategy;
- Innovative strategy.

The choice of a particular strategy option or their combination depends on the capabilities of the firm itself and its resources, as well as on the factors that shape the demand conditions and business climate in a particular market

## Commodity policy of international firms, its types

Developing *a product marketing strategy* is a central part of an international firm's marketing activities.

A firm operating in one or more foreign markets must decide whether to adapt its marketing mix to local conditions. There are 4 main product marketing strategies

- 1. Standardized product development strategy. The company transfers to the international market its assortment policy adopted for the domestic market (product quality, trademark, design, etc.). This approach minimizes production costs and marketing expenses. However, it limits the possibility of creating specific foreign markets or their segments.
- 2. Adaptation strategy. The introduction of a product to the international market is carried out without any adaptation of the product. The question, as a rule, is

- not whether to adapt, but what kind of adaptation. Adaptation can be physical (changing physical parameters increasing power, reducing weight, etc.) or cultural (changing color, design, product name, etc.).
- 3. The "reverse invention" strategy. It is most often used when introducing goods to the markets of developing countries. Its essence lies in the fact that the company's product for these markets should be simpler than for the national market.
- 4. *New invention strategy*. The most expensive and risky option for product planning is when a new product is developed for the international market. In this case, you should anticipate the possible reaction of potential buyers and its development over time.

The main factors to consider when developing a perfect product policy are:

- The firm's goal is to maximize profits or penetration and stay in the international market for a long time;
- markets, their requirements and real needs;
- resources of the firm;
- the nature of the product, i.e. the duration of its life cycle, attractiveness, required level of service, trademark, ease of production, legal restrictions.

There are three types of product policy:

- *Concentric*, when new products are sought that would be technologically or marketably "in tune" with the firm's existing products and attract new customers;
- Horizontal, when the new product is essentially a continuation of the one already being sold and is designed for an established circle of consumers, and its production does not require significant technological changes from the company;
- *Conglomerate*, when a new product is exported that has nothing to do with the goods that the firm had before, and therefore requires the development of new technologies and the development of new markets.

### Pricing policy in the international marketing system

The definition of *international pricing policy* is given considerable attention by firms wishing to operate effectively and for a long time in foreign markets. A targeted pricing policy in international marketing is to set prices and change them depending on the market situation, which would allow to gain a certain market share, obtain the planned amount of profit, and solve other strategic tasks.

In practice, the development of an international pricing policy involves determining the optimal selling price of goods or services for each individual country, and then making the necessary adjustments to ensure price uniformity.

The basis for calculating export or import prices in foreign economic practice is the price of the main commodity markets. They reflect the global average conditions for the production, sale and consumption of specific goods. Therefore, in order to exchange goods on an equivalent basis, these goods must be valued at world market prices.

Prices in international trade are divided into *free market prices and closed market prices*, depending on the specifics of the markets where they are applied (Fig. 9.1).

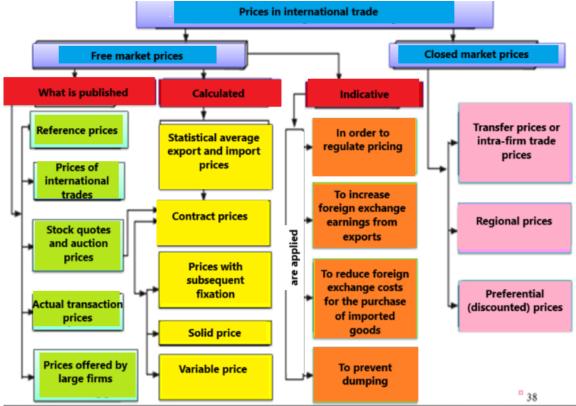


Fig. 9.1. . Types of prices in international trade

The pricing methodology for a company that has decided to enter foreign markets usually includes the following steps:

- 1. Setting pricing goals:
  - Gaining maximum market share,
  - Gaining leadership in quality,
  - maximizing current profits,
  - ensuring survival
- 2. Accounting for price factors (demand (price ceiling), costs (price floor), supply (competition), government pricing policy: fixed, regulated and free prices, etc.)
- 3. Choosing a pricing method based on price factors:
  - Demand-based pricing is carried out through the buyer's subjective assessment of the value of the goods and their quality. An increase in demand leads to an increase in prices and vice versa;
  - Cost-based pricing "average costs plus profit".
  - Supply-based pricing based on the level of competition;
  - The current price method the company starts from the prices of competitors;

- The "sealed envelope" method - setting the price during a closed tender (to achieve a favorable contract, the company sets the price as low as possible, based on the expected offers of competitors).

Depending on the various aspects of the manufactured goods, a firm's pricing policy may be based on one of the following approaches:

- setting prices on a geographical basis;
- setting prices with discounts and credits, when the company provides discounts for cash payments, for quantity; seasonal or functional discounts, etc;
- setting the price for a new product;
- setting prices to stimulate sales;
- setting discriminatory prices, when a company sets different prices for different customers, for different types of goods, etc;
- setting prices for additional goods, mandatory items, and by-products of production.

The choice of pricing policy depends on the goals pursued by the firm:

- achieving the targeted return on invested capital;
- profit stability;
- stability or improvement of the market image;
- success in the competitive struggle;
- a leading position in the relevant field of activity.

Ways to implement a company's pricing policy include various options, among which the most common are:

- avoid setting the price of their products below the cost of production;
- try to set the price of their products lower than that of competitors;
- go at the market price;
- set prices at the level of a certain competitor's prices;
- set prices in such a way as to obtain the targeted amount of profit, etc..

## Sales policy in the international marketing system

In the process of developing *an international sales policy*, a firm must make and implement decisions on sales channels or routes, i.e. develop a system of physical movement of goods through the selected sales channel.

The *distribution* (sales) *policy* in international marketing should be understood as a set of measures necessary for the delivery of goods to a foreign market directly or indirectly, independently or with the help of intermediaries. The objectives of the distribution policy in international marketing are as follows: maximizing turnover; increasing the market share of the company; minimizing sales costs; creating and maintaining the prestige of the chosen distribution channel, long-term relationships within the channel of goods movement while maintaining its flexibility; optimizing the number of sales intermediaries involved in the distribution process.

The tasks of the distribution policy include the choice of the distribution system (centralized or decentralized); the choice of the form of distribution organization (own or third-party sales bodies); the choice of the distribution channel (direct or indirect).

The choice of product distribution channels is the most important stage in the work of international marketing.

The process of organizing sales logistics for an international company involves five interrelated stages :

- 1) selection of the place of storage of stocks;
- 2) determination of the cargo transportation system;
- 3) implementation of the inventory management system;
- 4) establishing the order processing procedure;
- 5) selection of transportation methods

These stages of organizing the movement of goods by international firms must be carefully thought out and planned in advance.

When organizing sales logistics on an international scale, there are three main options:

- 1. The company produces medicines in one country and supplies them to the markets of other countries. The distribution process is managed centrally.
- 2. The firm establishes several independent enterprises in different countries, each of which is engaged in production and marketing. In this case, there is a complete decentralization of the movement of goods, the organization of which mainly becomes the business of each independent enterprise.
- 3. The firm has several plants in different countries serving many markets. This option is characterized by a rather complex structure of sales logistics, which requires careful planning and thoughtful distribution of responsibilities to prevent unproductive duplication of supplies to individual markets.

#### Promotion of medicines on the international market

The policy of promoting a pharmaceutical product to a foreign market involves communicative influence on the consumer and interaction with the marketing environment, the purpose of which is to encourage the buyer to purchase a particular product. Promotion or use of a complex of marketing communications is aimed at uniting the interests of the consumer and maximizing the benefits of the manufacturer.

An international advertising campaign is built depending on whether it is to be standardized or specialized, adapted to specific local markets. The informational role of advertising comes first, as it introduces the public to new products, product concepts, and the conditions for their use.

Stimulating the sale of medicines in the foreign market pursues virtually the same goals as in the domestic market.

#### PRACTICAL ASSIGNMENTS

Task 1. The driving forces that make a pharmaceutical company start exporting its products to develop its resources in order to achieve long-term or short-term goals are called the motives for entering the international market. The motives for starting a pharmaceutical company's activities in foreign markets are divided into 2 groups: proactive and reactive. Provide a brief description of proactive and reactive motives, fill in tab. 9.1 and tab. 9.2.

Tab. 9.1 Characterization of proactive methods of pharmaceutical companies entering the international market

Proactive motives for starting a business	Characterization of motives
1	2
Profit and growth	
Ambitions and focus of marketers	
A unique medicinal product	
Opportunities in foreign pharmaceutical markets	
Economies of scale in pharmaceutical production	
Tax and other financial benefits	

Tab. 9.2

## Characterization of reactive methods of pharmaceutical companies' entry into the international market

Reactive motives for starting a business	Characterization of motives
1	2
Unexpected foreign orders	
Competitive pressure	
Insufficient size of the	
domestic market or reduced activity in it	
Beyond production capacity	
Proximity of foreign	
consumers	
Moral obsolescence of own drugs	

*Task 2.* Schematically present the stages of a pharmaceutical company's entry into the international market.

**Task 3.** Entering the national markets of other countries with its medicinal products, the company may face certain trade restrictions, namely of a precautionary and behavioral nature. Schematically indicate possible trade restrictions when entering the foreign pharmaceutical market and give a brief description of them.

**Task 4.** Suggest a way to organize international marketing for the following pharmaceutical companies – look *tab. 9.3* 

Tab. 9.3 Organization of international marketing

Pharmaceutical companies	Characteristics of the activity	The way to organize international marketing
1	2	3
Pharmaceutical company "DragPharm"	Produces and sells a wide range of over-the- counter and prescription drugs worldwide	
Pharmaceutical company "Farmsvit"	Established a joint venture in Hungary to pack its own products, selling them in the CIS, Germany and Poland	
State Enterprise "Liknational"	Produces a relatively small range of medicines and partially sells them in the CIS countries	

**Task 5.** The pharmaceutical company Adonis, which has a good reputation in the Western Ukrainian pharmaceutical market, has been approached by the European pharmaceutical manufacturer "Startfarm", a potential investor, with a proposal to establish a joint shop for packaging products in branded packaging. The capabilities of a Western investor are not limited and allow organizing even mass production, which will be aimed at consumer demand.

At the same time, the Western investor was interested in data on market dynamics, its development forecast for 2024 according to a study of consumer demand for medicines of this range and their socio-demographic characteristics. The investor sees its goal in reaching 20% of the regional pharmaceutical market, offering marketing costs of at least 10% of the total turnover.

The pharmaceutical company Adonis has the following data on the structure of regional turnover (Tab. 9.4).

- 1) Analyze the dynamics of the turnover of medicines and draw a conclusion about the visible structural changes. Which of the listed product markets should be chosen for joint production? Why?
- 2) Make a forecast of the development of turnover in your chosen commodity market for 2024 using the methods you know. The investor would like to see several variants of the forecast obtained by different methods.
- 3) Calculate the total marketing budget in the 2024 forecast year, taking into account that the average population will not change significantly and will remain at the level of 6.5 million people.

# Dynamics of the turnover of medicinal products in the Western Ukrainian market for the period 2018-2023 (in UAH) per consumer

№	Name of the product group	2018	2019	2020	2021	2022	2023
1	Painkillers	25.8	25.8	26.6	26.6	27.4	27.4
2	Cardiovascular drugs	31.3	33.3	34.7	36.7	37.4	38.8
3	Anti-inflammatory drugs	7.0	8.4	9.1	10.9	12.6	14.0
4	Antiallergic drugs	6.2	7.0	9.6	10.4	12.0	13.4
5	Together	70.3	74.5	80.0	84.6	89.4	93.6

## After completing the practical assignment, the student should acquire practical skills and abilities:

- identify the motives and stages of pharmaceutical companies' entry into the international market;
- determine the algorithm for a pharmaceutical company to enter the international market;
- to characterize the restrictions on the promotion of medicinal products on the national markets of other countries;
- determine and apply the method of organizing international marketing of international pharmaceutical companies at the present stage;
- choose commodity markets for joint production.

#### **SELF-CHECK TESTS**

1

A set of interconnected national markets of individual states that participate in the international division of labor, trade and other economic relations is:

- A. International market
- B. Currency control
- C. Economic environment
- D. Commodity market
- E. Medicines market

2

A pharmaceutical company planning to enter the foreign market conducted an analysis of the international marketing environment. What function of international marketing is used in this case?

- A. Analytical
- B. Production
- C. Sales
- D. Control

3

The state policy of protecting the domestic market from foreign competition is called:

- A. Protectionism
- B. Liberalization
- C. Diversification
- D. Nationalization

4

A pharmaceutical company plans to sell its own products in another country by transferring them to the ownership of a foreign intermediary. Determine the form of entry of the enterprise to the foreign market.

- A. Export
- B. Direct investment
- C. Joint venture
- D. Licensing
- E. Franchising

5

State the name of the regulation of external economic activity through permits issued by government bodies for export or import:

- A. Licensing
- B. Quotation
- C. Combination
- D. Technical barrier

6

A pharmaceutical company plans to operate in another country by establishing a partnership with a foreign company in order to combine production and marketing. Determine the form of entry of the enterprise to the foreign market.

- A. Joint venture
- B. Direct investment
- C. Export
- D. Imports
- E. Tender

7

A Ukrainian pharmaceutical company organized a subsidiary abroad. What form of international business organization does this refer to?

- A. Direct ownership
- B. Direct export
- C. Licensing
- D. Contract manufacturing of medicinal products
- E. Joint venture

8

The pharmaceutical company is planning a long-term capital investment in another country, which will ensure control over activities in the foreign market. Determine the form of entry of the enterprise to the foreign market.

- A. Direct investment
- B. Joint venture
- C. Export
- D. Imports
- E. Tender

9

When entering a foreign market, pharmaceutical companies encounter various types of trade restrictions. Quantitative limitation of medicines allowed to be imported into the country has a name:

- A. Quota
- B. Franchising
- C. Embargo
- D. Customs tariff

10

The company plans to enter the foreign pharmaceutical market and should study tariff barriers. As for this type of barriers?

- A. Customs
- B. Quota
- C. Currency control
- D. Limit price
- E. Norms of self-restraint

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