

4th year, 7th semester
of UEF. Economics section
pharmacy organizations

Lecture 3

Analysis and planning of the volume of sales of pharmacy products

Lecture plan.

1. Trade turnover. Definition.
2. Qualitative and quantitative characteristics of the sale of goods
3. Structure of the volume of sales of medicines
4. Factors affecting the value of turnover
5. Analysis of the volume of sales of pharmacy products.
- 6..Planning the volume of sales of pharmacy products
7. The gross income of the pharmacy.

1. Trade turnover. Definition.

The sale of goods is the basis of the financial efficiency of the trading organization. This concept includes the purchase, transportation, warehousing, and sale of goods. Sales can be represented as the process of turnover of goods or commodity turnover, which consists of three elements: consumption (sales - P), receipt of goods (arrival - R), commodity balances at the beginning and end of the reporting period (stocks – About the beginning, About the end). These elements are interconnected and can be represented by the commodity balance formula:

About the beginning + P = R + About the end

<i>the amount of the remaining goods on the starting date</i>	+	<i>receipt of goods (purchase)</i>	=	<i>Amount of goods sold</i>	+	<i>the amount of the remaining goods at the end date</i>
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For example.

For the month of September, the pharmacy had a movement of goods:

1.the amount of the remaining goods

on the starting date (as of 01.09.) 135 thousand rubles.

2.for this month, goods were purchased for 280 thousand rubles.

3.Goods sold in September in the amount of 290 thousand rubles.

You can calculate the amount of the remaining goods on the last date (September 30). For this calculation, we will substitute our data into the commodity balance formula:

$$135 + 280 = 290 + X,$$

where X is the balance of goods on the last date (September 30)

X=135+280-290=125 the balance on September 30 is 125 thousand rubles

The main characteristic of sales is the sale of goods. In addition, sales indicators are a characteristic of meeting demand in the pharmacy range of products. The volume of sales can also be called sales volume, sales revenue, turnover. Sales (turnover) is the main economic indicator of the pharmacy and is closely related to other indicators: income, circulation costs, profit, profitability.

Turnover is the volume of sales of goods and services in monetary terms for a certain period of time (day, month, quarter, year).

2. Qualitative and quantitative characteristics of the sale of goods

Sales (turnover) it can be characterized qualitatively or quantitatively

The qualitative characteristics include:

- Average per capita consumption of pharmacy products (calculated per 1 consumer on average, characterizes the level of drug care, awareness, purchasing power, standard of living in the region)
- Average sales volumes per 1 employee in a pharmacy (characterizes the productivity of pharmacy workers)

- The structural composition of the goods sold by groups of goods or pharmacological groups of medicines (characterizes the structure of consumption)

Quantitative characteristics are

- sales volumes in monetary terms in retail or wholesale prices for a certain period of time
- sales volumes in physical terms for a certain period of time

3. Structure of the volume of sales of medicines

1. The structure of the turnover can be represented

by the constituent elements:

For example:

by the nature of consumers

Sales to medical organizations

Sell to other organizations

Sales to the public

This structuring is important in approaches to trade planning. When planning sales to organizations, the amount of sales will be determined by the allocations allocated to them for the purchase of medicines. The planning of sales to the population will be carried out according to the methods of retail sales planning.

2. By nomenclature (by product groups)

medicines and chemical

products dressings and patient care items

perfumes and cosmetics

medical equipment and eyeglass optics

The **medicines group**, in turn, can be structured according to **pharmacotherapeutic groups of products:**

antimicrobial

analgesic, antipyretic, anti-inflammatory drugs

affecting the cardiovascular system

3. By the method of sale to the public

Sales to the public (by prescription and without prescription)

Vacation to the public by free and preferential prescriptions.

4. The range of pharmacy products can be structured according to the amount of demand:

Products with growing demand

Goods with neutral demand

Goods with falling demand

Products with constant demand

Products with pulsating (seasonal) demand

Products with unpredictable (highly variable) demand

4. Factors affecting the amount of turnover

Quantitative factors: their analysis makes it possible to determine the degree of influence

- Morbidity rate
- Size and structure of inventories
- Prices for pharmacy products
- Number of visitors
- Number of pharmacies and medical organizations
- Number of doctors and pharmacists
- Solvency of visitors

Qualitative: the analysis allows you to identify the likelihood of an impact on the implementation

Nature of consumers: population, organizations, children, elderly, privileged categories

Method of sale: by prescription, without prescription, open layout, closed layout

Intensity of demand, dependence on the season

The level of awareness of visitors

The level of advertising activity

The growth of trade turnover is promoted by

- ❖ Growth in the number of doctors and pharmacists
- ❖ Aging of the population
- ❖ Price increase
- ❖ New highly effective and expensive medicines
- ❖ Advertisement

The containment of trade is facilitated by:

- Prescription of medicines
- Restriction of advertising
- Low solvency of the population
- Lack of awareness
- Low level of consumption culture
- Insufficient assortment of goods

5. Analysis of the volume of sales of pharmacy products

Analysis tasks:

1. Analysis of the implementation of the plan for the sale of goods by structure and volume
2. Study of the dynamics and structure of the sales volume
3. Determination of the reserve for increasing the volume of sales

The source of information is accounting and statistical reports for previous years

That is, intra-production data and data on the state of the market (external data).

Data from the commodity report, cash register, recipe accounting logs, average daily turnover, product balances, receipt of goods in aggregate terms, etc. are used.

External data can be represented by data on population dynamics, employment dynamics, price index dynamics, inflation rates, demand dynamics, supply dynamics. These data can be obtained from statistical reference books, yearbooks Rosstat , Goskomstat, overview data from periodicals.

The main stages of the analysis:

- 1) Study of the dynamics of the performance of indicators of turnover, assessment of the degree of performance in comparison with the planned indicators;
- 2) Analysis of the influence of factors on the performance of turnover;
- 3) Identification of a reserve for increasing turnover.

To perform the analysis , the compliance of the indicators is checked for three parameters:

A) by prices – through the price index;

B) by time – for the same time intervals (average daily turnover)

C) comparability in space: for the same one and the same retail space, organization, division.

Stage 1. The study of the dynamics of trade turnover indicators is carried out by calculating the chain and basic indicators of growth rates. To do this, compare the actual data for a number of years. Absolute, relative and average values are calculated. The indicators of turnover fulfillment for a number of years constitute a dynamic series.

Dynamic series can consist of both absolute and their relative and average values

Example: data on the sale of goods for a number of years:

2023 – 23.5 million rubles.

2022 – 22.5 million rubles

2021 – 21.0 million rubles .

In the process of analysis , growth rates are calculated . To do this, you need to correlate the data of the next year to the data of the previous year.

$$\text{Growth rate } 2023 / 2022 = 23.5 : 22.5 = 1,044$$

$$\text{Growth rate } 2022 / 2021 = 22.5 : 21.0 = 1,071$$

$$\text{Average growth rate} = (1.044 + 1,071) : 2 = 1,057$$

Stage 2. Analyze the influence of factors on the turnover.

Price impact.

When predicting possible changes in sales volumes, the price elasticity of demand for a specific drug or a group of drugs can serve as a guideline.

If the demand is elastic , the coefficient is greater than one $|E| > 1$, the sales volume decreases with the price increase;

If the coefficient of elasticity $|E| = 1$, the change in price and sales are inversely proportional

If the demand is inelastic, the coefficient is less than one $|E| < 1$, with a change in price, the volume of sales changes slightly, other factors may influence here;

The growth of household incomes leads to an increase in sales volumes. But since not only incomes are growing, but also prices, real incomes are declining.

When forecasting the volume of sales, it is necessary to take into account inflation. This can be done using the Consumer Price Index (CPI).

CPI = Price per month. Korz. present. bp. : The price of the post. Korz. Background. period

Example: 2400 rubles. : 2280 rubles. = 1,053

The rate of inflation = (CPI of the present century – CPI of the past.year) : CPI predyd.years x 100%

Example: (1,125 – 1,053): 1,053 x100% = 6.84%

Stage 3. Analyze the projected changes in external and internal factors that may affect the turnover in the coming period.

For example: the opening of a shopping center nearby, the commissioning of a new enterprise, the opening of a polyclinic in the immediate vicinity of a pharmacy can contribute to an increase in turnover.

a reduction in the population, an increase in the unemployment rate, an increase in energy prices, a crisis situation in the economy can lead to a decrease in trade turnover.

The data obtained as a result of the analysis are used to plan the turnover for the upcoming period..

6..Planning the volume of sales of pharmacy products

If no significant changes are expected in the upcoming period, the turnover plan is calculated according to the standard methodology.

A turnover plan is an estimate of future sales in monetary terms for a certain period of time.

From the data obtained as a result of the analysis, we use :

Trade turnover for the reporting year (2023) – 23.5 million rubles.

The average growth rate of trade turnover is 1,057

According to official statistics, the expected price increase will be 3.5%

The T/O plan for 2024 will be :

$T/O_{2023} \times C_p \times \text{Growth rate} \times \text{price growth index}$.

Calculation:

$23.5 \text{ million.rub} \times 1,057 \times 1.035 = 25.7 \text{ million rubles}$.

Thus, under the unchanged working conditions of the organization, a reasonable

turnover plan for 2021 will amount to 25.7 million rubles.

The calculated turnover plan for the year is distributed quarterly.

To do this, a preliminary analysis is carried out for previous years and the share of implementation in each quarter of the year is determined.

Example: in 2020, retail turnover for the year amounted to 23.5 million rubles.

Quarterly:

1 sq. – 6.2 million rubles; 2 sq. -5.8 million rubles; 3 sq. – 5.2 million rubles
4 sq.- 6.3 million rubles.

In % quarterly turnover was completed:

1 sq. - 26.4%; 2q. - 24.7%; 3q. - 22.1%; 4Q. - 26.8%

In accordance with the revealed ratios, the plan for 2021 will be distributed quarterly as follows:

1 sq. – 25.7 million rubles x 26.4% : 100% = 6.8 million rubles.

2 sq. - 25.7 million rubles. x 24.7% : 100% = 6.3 million rubles

. 3 sq. – 25.7 million rubles. x 22.1% : 100% = 5.7 million rubles.

4 sq. – 25.7 million rubles x 26.8% : 100% = 6.9 million rubles.

Thus, the turnover is planned to be carried out during the year unevenly by quarters, since the consumption of pharmacy products during the year significantly depends on a number of factors and is uneven.

Similarly, the distribution of the turnover plan for each month of the quarter is carried out (in accordance with the current share of each month in the quarter).

In addition to selling to the public at full cost, pharmacy organizations sell pharmacy products to medical and other organizations. Planning of this part of the turnover is carried out in accordance with the data of contracts for the supply of medicines concluded between the pharmacy and medical organizations. It is also determined by the allocated allocations for the medical organization, the needs of the medical organization, its specialization, the number of beds, the profile of the institution, and other factors.

The turnover plan for organizations is equal to the allocations allocated to these organizations for the purchase of medicines and other pharmacy products

In this case, the total turnover is planned as the sum of the sales sections: to the population and medical organizations.

7. Pharmacy gross income

The result of the pharmacy's trading activity characterizes the income from the sale of goods. It is defined as the excess of revenue from the sale of goods and services over the costs of their acquisition over a certain period of time in monetary terms.

The difference from the sale of goods in retail prices and the wholesale value of these goods represents the realized trade overlaps.

The pharmacy purchases goods at purchase (wholesale) prices. The retail price consists of the wholesale price and the retail trade margin on the product. In the previous lecture, we considered the structure of the retail price and the procedure for calculating the trade margin on retail goods. For the calculation, the level of the trade margin was used – this is the ratio of the size of the trade margin to the wholesale (purchase) price, expressed in %.

For example: The pharmacy purchased the product "Acyclovir, tab. No. 20" at the price of 50 rubles. for 1 package. If we assume that the level of the trade margin allows 30%,

the pharmacy's trade margin will be 30%, i.e. $50 \text{ rubles} \times 30\% : 100\% = 15$ rubles.

Thus, the retail price for this product will be 65 rubles. for 1 package.

The difference between retail and wholesale prices in the form of a retail trade margin represents the trade margin or income from the sale of goods.