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## Methodical Approaches to the Management of the Assortment of Toothpastes.

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### ABSTRACT

The article is about working out the methodical approaches to the management of the assortment of the parapharmaceutical goods at the pharmacies at the example of toothpastes. The information basis for the research was the results of the consumers' online survey and the analytical reports 'Inforum' of the year 2013 about the purchase of the goods by the pharmacies of the city of Kursk. Analysis of the initial data has allowed us to work out the conceptual approach to the management of the assortment of toothpastes at the pharmacies.

**Key words:** management of the assortment, toothpastes, customer loyalty, analysis of the consumers' preferences.

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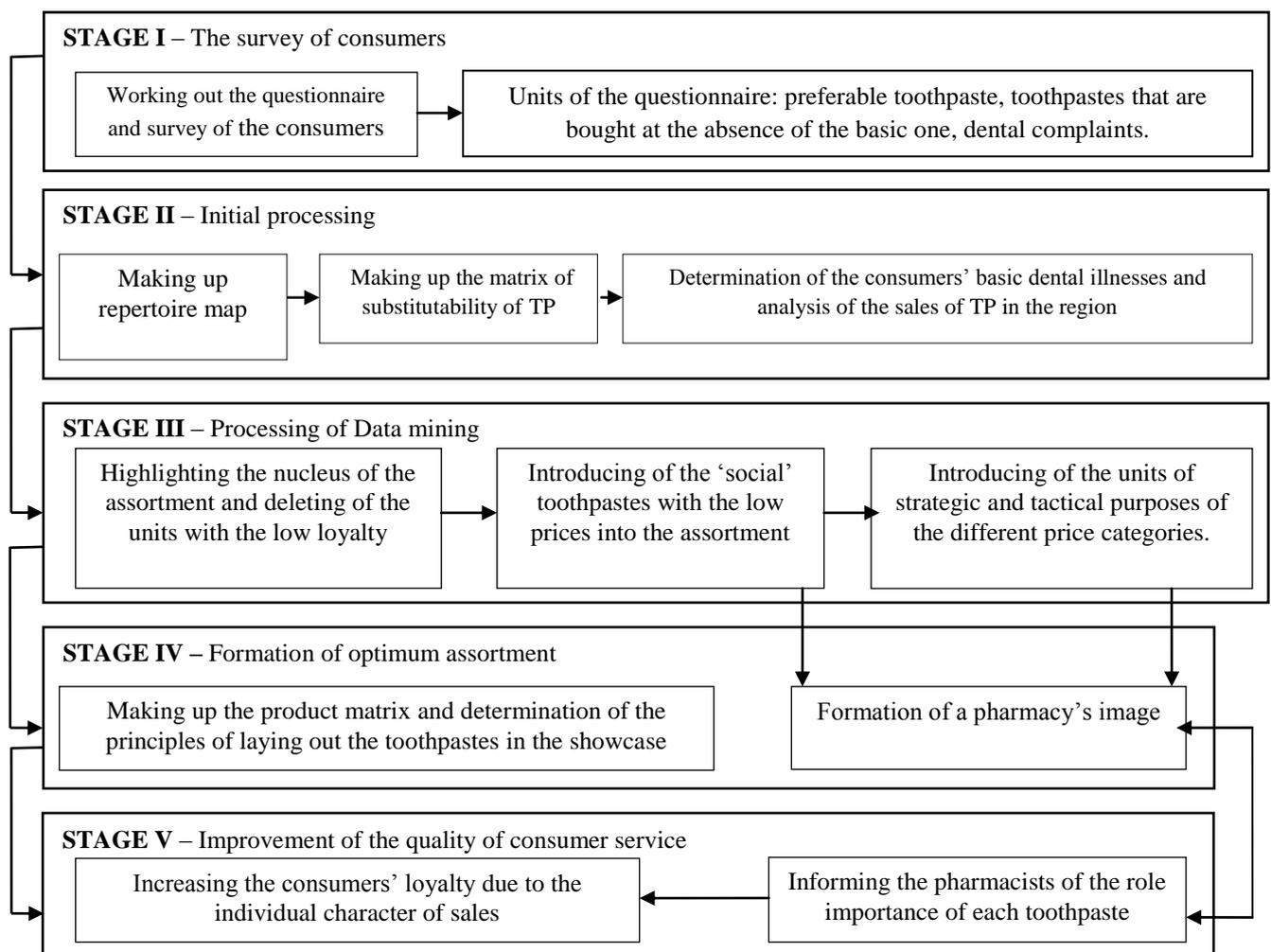
**Introduction**

At present management of the assortment is of great importance for all the pharmacies, both the walking distance pharmacies and big pharmacy networks [1, 2]. Management of the assortment includes its formation, maintenance and changing for the maximum satisfaction of the consumers. It is a part of strategic management determining a pharmacy’s competitiveness.

A pharmacy often forming its assortment at the limited shelf space [3, 4] offers too wide assortment. The idea that optimum assortment is a wide assortment is a mistake [5]. Too wide assortment leads to the reduction of the consumers’ activity and trade turnover [6].

The aim of our research was working out the methodical approaches to the management of the assortment of the parapharmaceutical goods at the pharmacies of the city of Kursk at the example of toothpastes (TP).

**Methods**



**Figure 1: The concept of management of the assortment of TP at a pharmacy.**

The information basis for the research was the results of the consumers' survey and the analytical reports 'Inforum' of the year 2013 in the city of Kursk.

In our research, we have used system and situational analysis, statistic methods, marketing (content analysis, conjuncture analysis) and sociological methods, Data mining method. The usage of these methods has allowed working out the concept approach to the management of the assortment of TP (Figure 1).

**The main part**

For the formation of the effective assortment, it is necessary to evaluate its perception by the consumers in order to adapt it to the customers' needs and expectations [7].

In the second half year of the year 2013 we carried out online survey of the consumers of the city of Kursk (2274 persons) in the social networks. The aim of the survey was the determination of the consumers' loyalty to the trademarks as they often buy the toothpastes of the different trademarks.

For the comparison of the consumers' loyalty to the different trademarks, we have introduced such indicator as the coefficient of loyalty (formula 1). Its quantitative indicators are presented in the repertoire map (Figure 2) as the coordinates at the X-axis. It is evident that the quantitative value of the coefficient of loyalty of the trademarks with the high consumer loyalty is closer to zero.

$$K_{loyal.TM_i} = \frac{\sum TM_j}{\sum TM_i}, \text{ where} \tag{1}$$

$TM_j$  – trademarks marked by the respondents as the substitutes of  $TM_i$ ;

$TM_i$  – the amount of the respondents preferring  $TM_i$ ;

$K_{loyal.TM_i}$  – coefficient of the consumers' loyalty to  $TM_i$ .

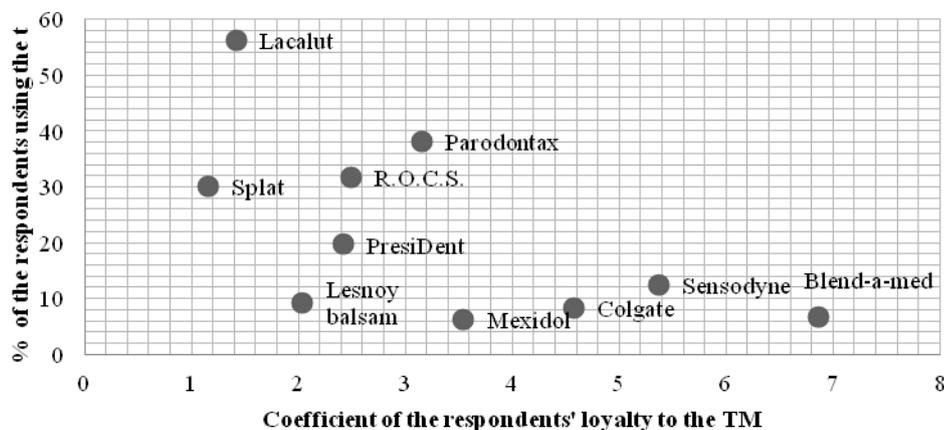


Figure 2: Repertoire map of the local market of the TP.

In the repertoire map one can see that the consumers of Lacalut ( $K_{loyal.} = 1,42$ ) and Splat ( $K_{loyal.} = 1,16$ ) choose from one or two trademarks at the absence of the preferable toothpastes and can buy any of the them. At the same time, the consumers of Blend-a-med ( $K_{loyal.} = 6,87$ ) are not the supporters of these trademarks (they chose from 5 – 7 other trademarks at the absence of these TP).

In order to define what trademarks are bought by the consumers at the absence of the preferable ones we have made up the matrix of substitutability of the TP (table 1). Along the vertical there are the preferable trademarks, along horizontal are their substitutes. Percentage values describe what share of the respondents buy a certain TP substitute at the absence of the basic one. Thus, 31, 3% of the respondents preferring R.O.C.S. will buy Splat in case of its absence, and 52, 2% will buy Paradontax.

**Table 1: Matrix of substitutability of the toothpastes**

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.		62,2%					36,6%			
2.								40,9%		
3.		31,3%					52,2%			
4.	4,1%	3,1%	3,6%		55,4%		20,4%	8,4%		6,1%
5.	10,8%	12,4%		61,3%						11,5%
6.	41,4%	14,7%		12,2%			24,6%	18,1%	10,7%	
7.	21,8%					39,7%				
8.	31,9%			27,5%					16,6%	
9.	10,3%		11,4%	13,6%	24,8%					
10.				40,1%	41,9%					

Where: 1 - Lacalut, 2 - Splat, 3 - R.O.C.S, 4 - Blend-a-med, 5 - Colgate, 6 - Sensodyne, 7 - PresiDent, 8 - Paradontax, 9 - Mexidol, 10 – Lesnoy Balsam.

A pharmacy must maximize the income from each unit of the shelf space [8], that's why it is necessary to determine the toothpastes that must be present in the assortment by all means. Having analyzed the initial data we have determined the trademarks with the high consumer loyalty (in italics in Table 1), in case of their absence at the pharmacy the consumers won't buy anything.

<b>Profit</b>	<b>Strategic goods</b> (TP with the high level of the retail margin that must be actively promoted for increasing of profitability)	<b>Core</b> (popular TP, formation of the flow of consumers and the main level of the profit)
	<b>Tactical goods</b> (formation of the pharmacy's image and the consumers' loyalty to the pharmacy)	<b>Social goods</b> (support of the pharmacy's image and the consumers sensitive to the price)
	<b>Demand</b>	

**Figure 3: Matrix of the role values of the assortment of the TP.**

Analysis of the results of the survey has allowed us to determine the consumers'

dental problems they go to the pharmacy with. The trademarks preferred by the consumers have many kinds administered for prevention and treatment of these illnesses. As a result of the analysis of the demand for the TP, we have determined the kinds of trademarks with the great demand. The results of the first stages of the research have allowed us to form and classify the assortment of the toothpastes according to the role values (Figure 3).

Making analysis of the results of the online survey we have determined that 63,3% of the consumers suffer from the bleeding and inflammation of the gums. It allows us to attribute the anti-inflammatory TP to the core of the assortment, and the greatest amount of SKU (stock keeping unit) is allocated for their placement at the shelf space [9]. These are the following toothpastes: Splat Medicinal herbs, Active and Green tea, Lacalut aktiv, Parodontax Classic, Lesnoy Balsam 'Intensive protection of the gums from the age of 50' and 'For prevention of the diseases of the gums'.

The core of the assortment also includes the toothpastes of the trademark R.O.C.S. used for the prevention of the diseases of the teeth in children (29,3% according to the results of the survey).

It is recommended to introduce the toothpastes R.O.C.S. Antitobacco and Coffee and tobacco, PRESIDENT Defense and Antibacterial into the core of the assortment as they are used for the whitening of the teeth and removal of dental plaque (16, 8 % and 19, 4 % according to the results of the survey correspondingly).

To the core of the assortment we should attribute the TP used for the sensitive teeth (42, 7 % according to the results of the survey): PRESIDENT Sensitive, Lacalut extra sensitive and Lacalut sensitive.

At the basis of the analysis of the consumers' dental problems and the dynamics of the sales of the TP registered in the years 2007 – 2010, we have determined the toothpastes of the strategic purpose. These are Lacalut aktiv Herbal, Lacalut basic Black currant and ginger, R.O.C.S. Uno Calcium, Rembrandt Plus (additional tactical product), ELGYDIUM (additional tactical product), Himalaya Herbals, Prirodny balsam Chamomile (additional social product). The last three TPs are the strategic products as they are necessary for satisfying the innovative consumers and personification of the assortment [10].

The group of the social goods in the assortment formed includes the TPs Lesnoy balsam and Prirodny balsam. We also propose to introduce the toothpaste Lesnoy balsam 'For sensitive teeth' into the assortment as it is necessary for the consumers sensitive to the price.

Tactical assortment includes the TPs for children: Splat 0 – 4 and TM PRESIDENT: Baby 0-3, Kids 3-6, Teens 12+. For one thing, they will broaden the consumers' choice, for another, the pharmacy will position itself as the organization taking care of the children's dental health.

Placement of the goods in the sales area must be carried out at the basis of the indication for use, but not the brand classification as it happens nowadays at the

pharmacies of Kursk. The consumers note that this distribution is more comfortable for them (according to the results of the survey such placement of the goods is more acceptable for 73, 4 % of the respondents).

### CONCLUSION

Thus, taking account the results of the research we have worked out the methodic approaches to the rational management of the assortment of the pharmaceutical goods for the pharmacies of the city of Kursk at the example of toothpastes.

### RESULTS

The conceptual approach to the management of the assortment of the toothpastes worked out by us can be used for optimizing the assortment and managing not only the segment of toothpastes but also the other categories of the parapharmaceutical goods. The approach can be used by both the entrepreneurs starting a new pharmacy and the pharmacies managers having the toothpastes in the assortment in case of dissatisfaction with the results of profitability of these category of the goods.

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