

Methodical approaches to a strategy of diversification to advance domestic production of medicines

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Abstract: This paper presents the results of marketing studies of drug provision of the Republic of Kazakhstan at the regional level, the example of JSC "Himfarm", located in South Kazakhstan region, Shymkent. To achieve the goal we have performed STEP-analysis, which revealed the social, technological, economic and political factors affecting the development of the regional pharmaceutical market.

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1. Introduction

A change of situation in the pharmaceutical market, occurred for the last few years, which was caused by a number of natural processes in particular transition to market mechanisms of regulation, accompanied by a process of transformation pharmaceutical property, destruction of the state monopoly in commodity distribution link, liberalization of the prices, and an active integration into world economy [1].

The current trend of policy of the state of the Republic of Kazakhstan is creating conditions for development of a domestic pharmaceutical industry and further diversification of medicines of republican production on the Kazakhstan pharmaceutical market [2, 3].

Essential changes of economic, social, scientific and technical conditions of industrial activity firms radically changed requirements to management. Hard-fought battles in the world markets, delay of economic growth and technical progress are demanded for transformation of production for which there was insufficient acquisition of the advanced equipment and technology for results of scientific research. That fact in many respects is explained by diversification which became the most widespread form of concentration of the capital [4].

The branches of diversification: vertical (extension of the production program at the expense of inclusion in it of production which is on the previous or following phase of production); horizontal (extension of the production program through inclusion in it new production which is verified with it in detail); lateral (inclusion in the

production program entirely the new products intended for new regions) [5, 6].

Thus, the market economy demands from the enterprise, continuous modification of production which is achieved according to change of inquiries of consumers. In the case of an addition to an existing product in the market, there is checking its modification – differentiation of production takes place.

Diversification before gained modern lines, within global strategy of firms passed a difficult way of development, changing under the influence of external circumstances, and intra firm criteria. The table shows the evolution of the corresponding ideas - from a manipulation by a set of goods to a manipulation in a set of the countries. The history of this evolution can conditionally be divided into four stages and in each one of them, there was a formation of such basic elements as: commodity set; branch set; set of branches in a field of activity and set of the countries (Table 1).

In this regard there is a problem determining a set of signs distinguishing branches from each other and influencing efficiency of diversification programs. Five major factors influencing potential are: allocated efficiency of branch; the competition between the firms which are letting out identical production; possibility of appearance of new competitors; production of goods substitutes; positions of suppliers of raw materials and materials and position of buyers in the market.

Without denying the importance of the listed factors characterizing appeal of diversification of production, we will specify how the enterprise is guided with choices of kinds of activities: economic

efficiency, level of enterprise risk, duration of a turn of a production, liquidity level.

The view of enterprise evolution set, the size of signs of difference remain invariable during a certain period of time. But a measure of satisfaction of requirements, saturation of demand, change of tastes and preferences of consumers change priorities

in society. The situation forces the enterprises to adapt adequately to a specific situation and to look for new goods, technologies and existing prospects. The cycles of diversification following cyclic fluctuations of an economic environment, in the long-term period generate a bottom multidirectional process (Table 2).

Table 1 – Evolution of diversification of production

Eras of the historical developments	The economic preconditions	Means of achievement of the objectives of production	The prevailing form of the organization of production	Consequence
Era of the mass productions (to end of the 20th century)	Concentration productions and capital centralization within branch	Goods creation for the market. Decrease in costs of production	Specialization productions ("pure branches")	Creation the commodity markets
Era of the mass it is sold (to the middle 1950's years)	Concentration the capital in limits branches. Commodity competition Overinvestment the capital in limits branches. The structural competition	Manipulation set of goods, used in the certain areas Manipulation set of branches (production technologically the interconnected production) Modulation of the capitals in other branches and spheres activity. Manipulation set of branches and fields of activity	The horizontal differentiation. The grocery (commodity) diversification. The vertical integration. Branch diversification (set of branches) The diversified diversification (set of branches and fields of activity)	Overcoming borders the commodity markets The branch Markets Overcoming borders the branch markets. The national markets
The post-industrial society	Overinvestment the capital in the separate countries The critical mass of volumes productions in world scale Competition between firms, activity which it is optimized on a global scale	Capital export in other countries. Regulation the world economic communications. Optimization profitability in limits activity Strategy the global optimization activity	The geographical diversification (set of the countries). The international integration. Internationalization productions The global diversification	Overcoming borders the national markets. The regional markets. Effect animations on the world level Overcoming borders the regional markets
Era information and computer technologies (since the end of the 1990's years)	World competition	Global optimization of world economic communications	World economic	World market

Table 2 – Alignment of branch levels of profitability

Traditional production	New production (diversification)
Falling of rate of return	High rate of return
Capital extraction	Capital investments
Decrease in volume of traditional production	Increase in output of new production
Negative effect of scale of production	Positive effect of scale of production
Offer reduction	Increase in the offer
Increase of the price of goods	Goods reduction of price
Increase in profit	Decrease in profit
Elimination of losses	Profit elimination

2. Material and Methods

It has to be noted one more aspect of search of potentially attractive spheres of activity. The analysis of publications allowed to allocate two opposite directions of this search. The first direction is characterized consecutive, carrying out the line on diversification on the basis of a primary activity, i.e. that branch of specialization which was originally based on enterprise creation. Sometimes it is called the key sphere or the main profile of the firm. Moreover, various indicators and methods of measurement of communications are offered.

The second management is other strategy connected with the statement of a variety of the main production. Between two extreme positions, in our belief, there is no contradiction. Having various approaches means that the strategic directions of diversification policy also depend on a financial condition and a tendency of evolution of the enterprise. The analysis of our empirical research directed to check this hypothesis, yielded positive results.

Now subjects of the market relations, in our opinion, do not own methods of control over a set of kind of activity, and the diversification portfolio is formed by a trial and error method.

In communication with that we suppose the following:

- It is necessary to pass from studying of foreign experience and check of the academic hypotheses to work and experimental check of hypotheses at the domestic enterprises.
- To the enterprises on personal experience to create a diversification portfolio.
- To develop such strategy of diversification which becomes important means a restructuring of the enterprise and which will increase competitiveness of the enterprise.

3. Results

The policy of moving ahead goods, in medicine resolves an issue of progress a way to the consumer with which is made by pharmaceutical enterprise. It includes all kinds of activity which are necessary to provide to the consumer of production in necessary quantity.

The decision on sale can be made only in coordination with other instruments of marketing [7, 8].

According to many scientists-marketing specialists there were the following characteristic of diversification: Diversification is a strategic orientation to various and versatile development of activity which includes the following types:

- Simultaneous development of many types of products which is untied with each other.
- Increase in quantity of types and product names and services,
- Distribution of means between various (in a number of parameters) assets for the purpose of reduction risk; penetration of the company into other offices.

In practice of pharmaceutical industry the following types of diversification are widespread:

A vertical variety - type of commodity strategy, agrees the enterprise expansion number of the made products.

A horizontal variety - range replenishment by products which aren't connected with released presently, but can cause interest of existing clients.

A conglomerate variety - range replenishment a product, without having any relation to the technology applied by firm and to its existing goods and the markets.

A concentric variety - range replenishment by new products which are similar to existing goods of firm with the technical or selling point of view [9, 10].

Now, pharmaceutical system and the enterprises of pharmaceutical production have started using a concentric model. For example, for discussion of a question about the changing of the status of medicines with prescription on the nonprescription [10].

So, we carried out concentric diversification which means close synergy connections, both with marketing, and with technological activity.

We developed a strategy "advance diversifications korvatablet which has common features with already existing medicines, for example

Corvalol, the Valocordin New by Passit, Grandaksin, Anaprilin.

Usually medicine is developed for new groups of consumers (patients). We developed the

main stages marketing plan for advance «Korvatableta» on the regional pharmaceutical market.

Table 3 – Description of the basic and target market of Korvatablet

Patients				Medicine area	Target audience of experts
Nosological forms (clinical segments)	Female/male	Age	Treatment place		
Neuroses from the raised irritability.	F/M	Adults	Out-patient	Neurology Therapy Cardiology	Neuropathologists Therapists Cardiologists Pharmacists Psychotherapists
Increases excitability.	F/M				
Insomnia, including sleeping violations.	F/M				
Tachycardia.	F/M			Therapy Cardiology	Therapists Cardiologists Pharmacists
Koronaro spasm.	F/M				
Early stages of a hypertensive illness.	F/M			Gastroenterology Therapy	Pharmacists Gastroenterologists Therapists
Spasm of digestive organs.	F/M				
Vegetovascular dystonia (neurocirculator dystonia)	F/M	Neurology Therapy Cardiology Gastroenterology Urology	Neuropathologists Therapists Cardiologists Pharmacists Psychotherapists Gastroenterologists		

Korvatablet (tablet) in pharmacological therapy belong to somnolent and sedative preparations. Official indications for application of Korvatableta as a calming and spasmolytic preparation are neurosis with increased irritability; hypererethism; sleeplessness including backfilling violation; tachycardia; coronary spasm (not sharply expressed); early stages of a hypertensive illness; spasms of bodies of a digestive tract (table 3).

Potential for development of the market and increase in production Korvatableta is indications for application of this preparation at vegetovascular dystonia.

The term vegetovascular dystonia refers to a balance violation between sympathetic and parasympathetic departments of vegetative nervous system.

Now vegeto-vascular dystonia is not considered an independent disease, and a syndrome – set of signs and symptoms which can meet at any pathology. At a variety of signs of the diagnosis of vegetovascular dystonia difficult as each doctor answering for the profile makes the diagnosis: if it is a neuropathologist that the patient has neurosis, tachycardia of the cardiologist or a vascular spasm, spasms of the gastroenterologist of digestive bodies,

sleeplessness's of the doctor, the urologist makes the diagnosis shortage of anorgasm.

At the same time manifestations of vegetovascular dystonia are very diverse. Depending on violations of this or that body system and then subdivide into other groups though these symptoms can be shown as isolated or together:

- The cardiovascular diagnosis are a heartache, tachycardia (tachycardia), feeling of decreasing heart, interruptions in heart work;
- Respiratory diagnosis - the speeded-up breath, impossibility to take a deep breath or on the contrary, unexpected deep breaths; feeling of shortage of air, heavy feeling, congestions in the breast; the sharp attacks of short wind similar to attacks of bronchial asthma, but provoked other situations: excitement, fear, awakening, zasypaniye;
- Yew dynamic diagnosis - fluctuations of arterial and venous pressure; blood circulation violation in tissues;
- Thermoregulatory diagnosis- unpredictable fluctuations of body temperature: it can raise to 37-38 degrees or go down to 35 degrees. Fluctuations can be constant, long or short-term;

- Dispepsical manifestations - disorders of work of a gastrointestinal path (belly-ache, nausea, vomiting, an eructation);
- Sexual frustration - are shown by erection and ejaculation disturbances at men, a vaginismus and a shortage of an orgasm at women. Thus, this libido (a sexual inclination) can be kept or lowered.
- Cystalgiya – the speeded-up, painful urination without symptoms of an illness of the urethral system and changes in urine
- Psychoneurological diagnosis - weakness, the slackness, the reduced working capacity and increased fatigue at small loading, tearfulness, irritability, headaches, dizziness, hypersensibility to weather change, cycle disturbances in dream wakefulness, concern, starts during a dream which mostly superficial and short [11, 12, 13, 14].

Most often manifestations of vegeto-vascular dystonia are mixed, but approach to treatment has to be identical. As all these manifestations are diagnosed separately from each other instead of as vegeto-vascular dystonia that for Korvatablet's preparation opens a potentially new clinical segment in treatment of vegeto-vascular dystonia.

The disease vegeto-vascular dystonia is widespread, but rarely diagnosed. Therefore, at the correct diagnosis of this disease Korvatablet's

preparation can become the first treatment of vegeto-vascular dystonia.

The population, with the diagnosis of vegeto-vascular dystonia is very great. In the population of Southern Kazakhstan, according to different data, it is not less than 10% [15, 16, 17, 18]. However, the number of diagnosed patients is limited and doesn't exceed 15-20% from the general population of patients. Also, about 15% of the diagnosed patients don't receive the corresponding treatment. At the same time, the unattended market, from the point of view of its transfer to the served market, not diagnosed patients (about 186 thousand people) make, and also for Korvatablet – is very wide.

The most extensive group who didn't receive the corresponding treatment is 7 thousand people. Therefore the capacity of the considered market is great (193 thousand people) while the served market shows more modest indicators (39 thousand people).

For definition of prospects for Korvatablet in the market, it is necessary to estimate first of all, branded structure of a studied segment of the pharmaceutical market (the served part of the market is investigated).

Information on the purpose of preparations after polls of doctors and pharmacists can be presented, in particular, in the following graph (Figure 1).

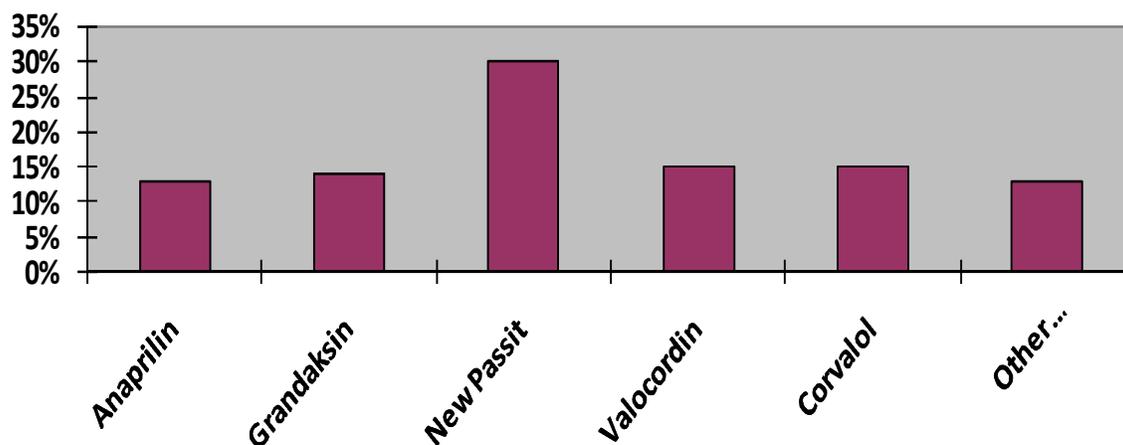


Figure 1 – Number of patients accepting treatments of vegetovascular dystonia by means of these drugs (percent of total of appointments doctors)

The biggest share of medicines is occupied by a share of the New Passit, the second place is taken Corvalol and Valocordin and these preparations suggest to others. Another preparation which has recently appeared in the market, Grandaksin, also is used by doctors as treatment for VVD (vegeto-

vascular dystonia) though 14% from total number of appointments are slightly more rare. Even more rare prescribed is Anaprilin, 13% from total number of appointments, so its basic purpose is for arterial hypertension.

For the purpose of receiving access to a clinical segment of VSD the following description of a preparation is submitted to doctors.

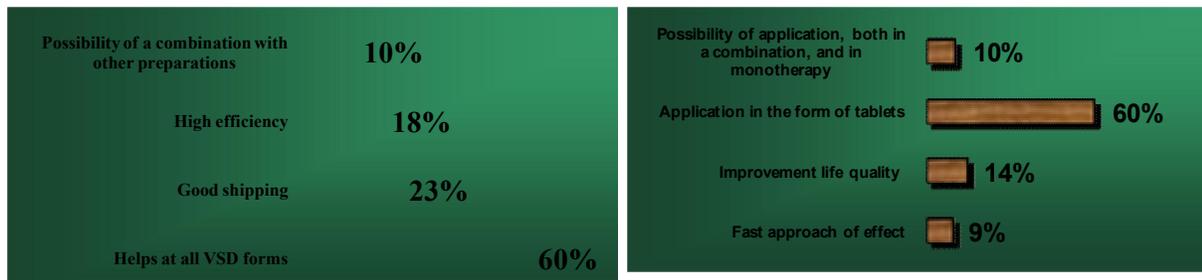
Korvatablet's preparation is a highly effective preparation as treatment of vegeto-vascular dystonia, namely for neurosis, tachycardia, hypererethism, sleeplessness, not sharply expressed vascular spasm, for spasms of bodies of a digestive tract. It is characterized:

- It is appointed at all manifestations of VSD;

- Fast approach of effect;
- Good shipping;
- Possibility of application in a combination with beta β -adrenoblockators, and in monotherapy.

After representation to respondents of the description of preparation established questions in the subjected form of attractive features in the description of preparation and its possible shortcomings.

What attracts in a preparation



Estimated shortcomings

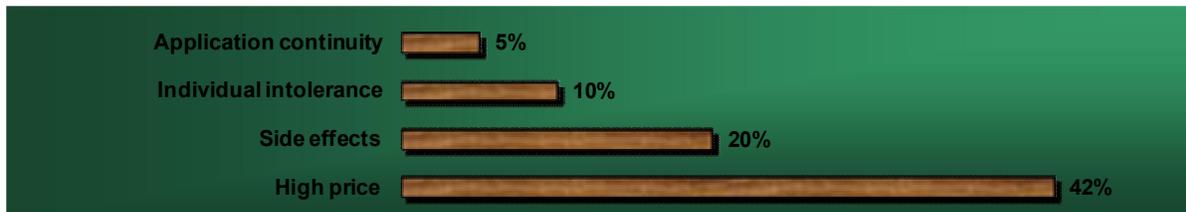


Figure 2 – Appeal and shortcomings Korvatableta.

The most attractive characteristics of Korvatableta (Figure 2), according to doctors, are application at all VSD forms, the tableted form, good shipping, and also the possibility of its application both in the combined therapy, and in monotherapy. Speaking about estimated shortcomings of a tested preparation, include possible side effects and its high price. As a result the probability of appointment of a new preparation is estimated by doctors, and also conditions of appointment and insignificant factors limiting preparation use are defined.

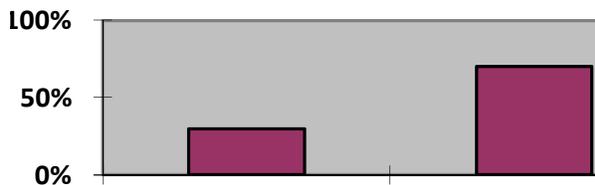


Figure 3 – Estimated number of patients which doctors will appoint Korvatablet.

By results of polls the majority of doctors confirm readiness to appoint Korvatablet to the Patients (Figure 3). Average number of patients whom Korvatablet can be appointed — 70%. To determine the price of a preparation, the Randomized Buying Response method was used. Procedure of implementation of the test following: to the respondent showed the prices of a product in a casual order and each time asked:

- Would you buy this product at this price?
- If not, why? Because too expensive or too cheap?

Obtaining the answers of the respondents showed the following price, and procedure repeated (Figure 4).

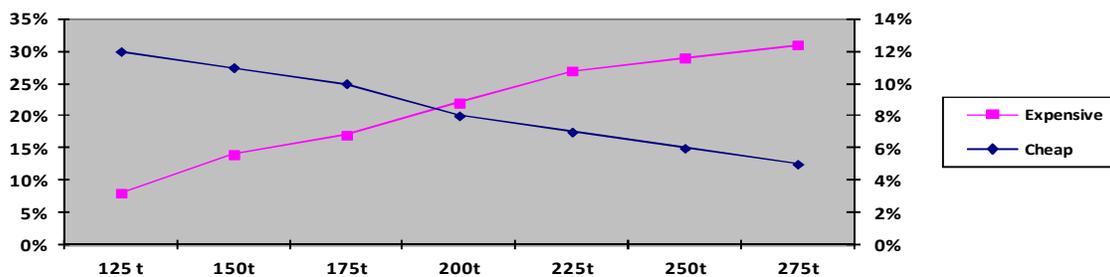


Figure 4 – Testing of the price for Korvatablet.

On graphics it is visible that the minimum number of consumers saying that the preparation is expensive (8%) and the maximum number of consumers saying that the preparation is cheap (12%)

meet at the price of a preparation of 125 tenges. Also, the maximum number of prescriptions Korvatableta 54% (Figure 5) is reached at minimum price from the ladder of the prices offered doctors – 125 tenges.

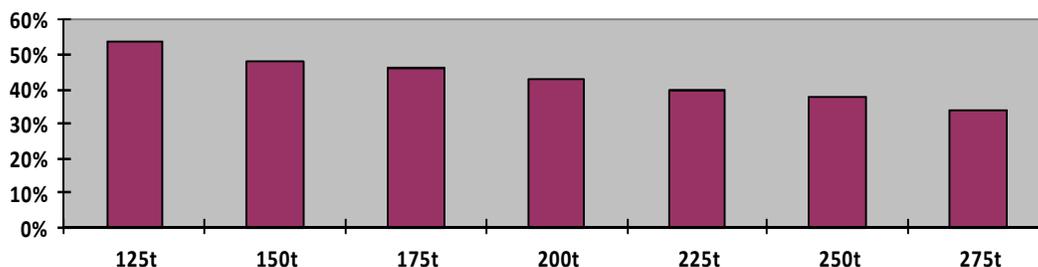


Figure 5 – % number of doctors ready to appoint a preparation at the set price.

The most effective Korvatableta were defined by advance channels, proceeding from

answers of doctors to questions of sources of information used in medical practice (Figure 6).

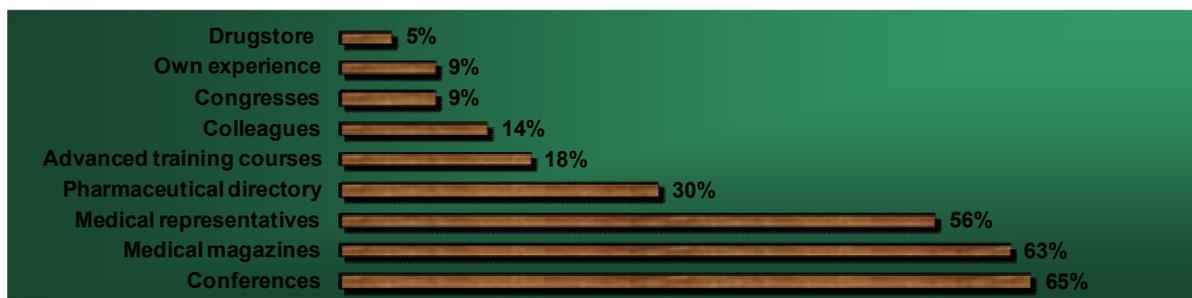


Figure 6 – The ways of progress of Korvatableta.

So, from figure 8 it is visible that most often doctors receive information on new preparations at conferences, from specialized medical magazines and from medical representatives of the companies of producers.

4. Discussions

Following the results of the conducted research it is possible to draw a conclusion that

Korvatablet can compete in the market with such preparations as Corvalol, Valocordin, Grandaksin, Anaprilin, and even the leader of the market New Passit. Respectively considering that the market share of Corvalol and Valocordin equals 15%, Grandaksin 14%, Anaprilin 13% and New Passit 30% (Figure 2), potentially Korvatablet can compete with these preparations for 50%, and occupy the niche in this

runder diagnosed and underserved market of vegeto-vascular dystonia from shares of 43%, i.e. in Korvatablet's absolute value can be recommended to 16,770 patients (in the served market). Thus, a conclusion Korvabalet on the unattended market numbering 193 thousand people as the "only" preparation for treatment of vegeto-vascular dystonia will make it directly the leader of the market. Such preparations as Corvalol, Valocordin, Grandaksin, New Passit are appointed at VSD, but none of them are presented to the consumer as the "only thing" for treatment of vegeto-vascular dystonia, so Korvatablet has every chance to become the leader first of all for undiagnosed, and in the second case, in the served market of a clinical segment of vegeto-vascular dystonia.

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