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## Pharmaceutical market in Serbia

Veselin Dickov<sup>1</sup>, Aleksandra Dickov<sup>2</sup>

<sup>1</sup>Institute for the health protection of students, Dr Sime Milosevica Novi Sad, Serbia

<sup>2</sup>Clinic of Addictions, Institute of Psychiatry, Clinical Center Vojvodina, Hajduk Veljkova Novi Sad, Serbia

### Email address

[vdickov@hotmail.com](mailto:vdickov@hotmail.com) (V. Dickov), [leladickov@gmail.com](mailto:leladickov@gmail.com) (A. Dickov)

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### Abstract

Marketing concept formed around the focus on the consumers, their needs, wants and demands, evolves in the case of pharmaceutical into a care of the complex interest of constituents generating demand on this market – prescribers whose role is to select therapies, pharmacists who dispense drugs within a specialized distribution channel to the final consumer -patient, alongside the payers – the state and or insurance companies refund a part of or total costs of the pharmaceutical product. A special challenge that the subject raises is the existence of controversy generated from two sources. Marketing controversy stems from criticism leveled at the effectiveness and efficiency of marketing activities and the debatable ethical code of conduct.

## 1. Introduction

Ever since the beginnings of history, medicine and pharmacy intertwine in man's effort to overcome the biological limitations of the human organism. Both have accompanied humanity on the way from magic and divine to rational and science based practices. The formation of pharmaceutical industry in the second half of 19th century marked the beginning of standardization of pharmaceutical products and regulation of the industry, and subsequently the sale and application of medicines. 150 years later, the industry is one of the most vital global industries, functioning on a specific market. According to pharmaceutical industry in the 20th century was marked by individuality, primary focus on science and the process of scientific learning, while the ethics and morals of the industry derived from medicine itself [1] [2]. The sum of human knowledge in the area of medicine and pharmacy have determined pharmaceutical industry over the past few decades, and provided a theoretical basis for predicting continued innovation which will ultimately transform the perception of the process of prevention, diagnosis and treatment. Today, discussing pharmaceutical industry implies several burning issues:

- Blockbuster drugs – contemporary pharmaceutical industry relies on the sale of a relatively small number of extremely successful drugs, whose annual sales, according to one of the criteria, exceed a billion US dollars. Blockbuster drugs are originator products, branded, and patent-protected drugs, the outcome of a long and costly R&D process. From the aspect of meeting humanity's medical needs, it is an objective fact that these drugs

were developed to 'resolve' the morbidity statistics of highly

- developed countries - the chronic, high-incidence diseases of the modern man. The development of new blockbusters and their survival are challenged due to reduced efficiency of pharmaceutical companies R&D process, generic substitution, and the trend of personalizing therapies through bio pharmacy [3][4].
- Generic drugs are the outcome of the limited period of patent protection of the original pharmaceutical products, whose active ingredient becomes 'common good' upon expiry of patent protection. Apart from proven bioequivalence, generics guarantee the availability of high-quality drugs to the widest population, as competition in the production leads to a rapid fall in prices. Generic drugs do not bring about new quality or more effective therapy for an existing health problem, apart from wide availability of the drug. With the growing availability of healthcare, pressures on payers result in preference for cheaper generic products. The essence of the dilemma related to the choice of (and/or preference for) the originator or generic products rests in the question whether the pharmaceutical industry will maintain the levels of investment in R&D that will generate advances in therapy, which will mean better and more effective fulfillment of humanity's medical needs [5].
- Lifestyle drugs are a separate group of drugs intended for conditions that give rise to a philosophical/moral dilemma whether they can be regarded as pathological conditions requiring medical and/or pharmaceutical therapy. These are 'disorders' such as sexual dysfunction, hair loss, obesity, signs of skin aging etc. This group of drugs may be regarded as the 'latest fashion' on this market, and terms this group of drugs as 'Vanity Drugs'. The culture of the Western civilization actively contributes to the growth in demand for this category of pharmaceutical products, turning this trend into a new quest for the 'fountain of youth' [6] [7].
- Biotechnology is the outcome of qualitative advances of medicine/pharmacy towards predictive and preventive medicine. The biotechnology concept is based on the use of biological systems, organisms and their derivatives. The most promising biotechnological discoveries are those in the field of recombinant DNA, with the potential of tailoring a man's/individual's genetic inheritance in such a way as to enable 'bypassing' biological limitations and irregularities. Biotechnology is related to the concept of individualized medicine/therapy tailored according to individual circumstances. In view of the still modest results, expectations from biotechnology are practically unlimited [8].

Marketing is both a scientific (theoretical) and practical discipline. The abundance of marketing theory in academic

circles is beyond dispute. There is a developed set of patterns, a glossary of the discipline, and a considerable body of knowledge. Once this knowledge leaves the premises of academia and enters the reality of economic life, a justifiable question is posed - to what extent is a set of generalized assumptions (and similar solutions) applicable in real life. This varies greatly from one industry to another. The application of marketing in pharmaceutical industry surpasses the framework of its application in the fast-moving consumer goods industry, where the discipline has reached its heights [9] [10].

## 2. Strategic Position Analysis

Qualitative research on an appropriate sample on the territory of Serbia, which included ten leading companies creating the offer of pharmaceuticals on this market, has shown that marketing practices function in authentically specific conditions. First of all, marketing function exceeds the framework of marketing profession and is taken over by pharmaceutical experts, who are, by their vocation and knowledge, closer to the nature, properties and application of the product that marketers would be. Such a form of solution objectively entails certain limitations from the aspect of knowledge of marketing principles, models and tools, which is reflected on their application in daily activities. Another significant determinant is based on the fact that this market functions within a strict regulatory framework, facing the application of marketing with a whole range of limitations [11]. The extensive body of available literature in the field of pharmaceutical marketing, supplemented by primary research, confirms the hypothesis that designing appropriate marketing strategies requires appreciation of specific conditions which distinctively define the pharmaceutical market as a separate - specialized market. However, designing and implementing an appropriate marketing strategy requires an organizational culture supporting (and reflecting) marketing business philosophy. The nature of the purpose of products and specific de fragmentation of the decision on the choice of products into several constituents that generate the demand for these products results in a different view of marketing. The objective level of development of pharmaceutical industry in the Republic of Serbia and other systemic limitations of a relatively underdeveloped economy, as well as the modest size of the market, do not leave sufficient space for viewing the complex logic and practice of pharmaceutical marketing in one of the most controversial contemporary industries. The very size of the US pharmaceutical market and the strength of global pharmaceutical companies competing primarily on this (in many respects) 'archetype market', but also on other markets worldwide, reveal all the controversies related to the industry and its use of marketing. Is marketing a value free, negative or positive concept? It depends on the point of view. Marketing concept starts

from the consumer [11] [12]. The goal of marketing is to use a careful analysis of consumers' needs (and wants) to create a value proposition that will be able to fully meet their expectations (better than the competitors). On this task, marketing uses sophisticated methods for researching the market, consumer behavior and competition, seeking to disperse the care of consumer satisfaction throughout the whole organization through a process of internal marketing. Modern marketing is value-driven, where the consumers and other constituents of the environment are regarded as partners, and marketing itself is focused on creating and maintaining long-term relationships with the target environment, surpassing a relationship based on a simple transaction. An organization's profits (and survival) result from superior fulfillment of consumers' needs. In the marketers' words, marketing has a clear value framework. It would be naive to believe that it is practically impossible to forget and/or deliberately distort this marketing logic in order to achieve opportune interests. In contemporary marketing, content holds sway over form, as only the ideas adding consumer or stakeholder value reflect a long-term orientation of marketing on creating value added [11][12] [13].

## 2.1. Analysis of Economic Indicators of Business Performance

Interviews with professionals involved in marketing in the pharmaceutical industry have revealed that this market shows a strong orientation of marketing on the content, information and knowledge in the function on higher quality of decisions made by prescribes, in a joint mission of providing patients with the best possible and/or available therapy. Consider the concept of evidence based medicine (EBM) conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients [14]. Where does this evidence come from? They are the output of scientific research process, clinical trials, advances in and development of the medical profession. However, according to pharmaceutical industry has inserted itself into every aspect of medical practice from medical education to basic research and clinical care.' Modern society has opened space for the pharmaceutical industry to legitimately claim the right to such impact, removing from society:

- a part (or all) of the care of continued education of physicians and pharmacists;
- the need to disseminate information in medicine/pharmacy via formal channels; and
- to conduct clinical trials proving the effectiveness and safety of a drug at the expense of society [15] [16].

In all this, the assumption on which the ethical/moral aspect of this concept rests is that commercial interest will not overpower the medical/altruistic. If the marketing function, marketing organizational unit and marketing activities were removed, would the problem disappear as well? Or are we trapped in a 'tangle of moral

compromise', where each of the parties gives something in exchange for something, but none of them is entirely satisfied? The crucial question is not whether pharmaceutical industry needs marketing. The root of the issue of relation between medicine/pharmacy and the way that they fulfill the needs of individuals/society is much deeper. The problem is the marketing. The Marketing is distorting information that we, as patients, read and understand 'There really isn't any place for marketing in medicine.' The problem is in drugs also, as at the present level of development of science and technology, with the current amount of human knowledge, drugs do not provide the ideal that we strive for. Another indicative fact is that new adverse effects are still being found for verified drugs used for many years (even decades). A part of this complex jigsaw puzzle, man's struggle against biological transience, is also the fact that man's appetites are growing, with expectations bordering on what is currently called regarded as science fiction. Despite all the disappointments, human expectations from medicine and pharmacy will keep growing. 'Surely, the scientists would argue, where the clinical differentiation is significant enough, marketing is superfluous.' Objectively, commentary is correct, however, even the best therapy will not yield satisfactory results from the aspect of the complex multitude of stakeholders if patients do not seek diagnosis and medical therapy (or at least not on time), if the informative function of marketing activities is lacking, or a set of additional services that may raise the patient compliance levels. Marketing is not a substitute for a product's therapeutic value, but may make an impact so as to realize this therapeutic value. According to developing new drugs is one thing; making them successful in the marketplace is another.' [16][17].

## 3. The Aim of the Research

Taking into consideration the nature of the initial hypothesis as the premise or assumption aimed at serving as a tool for organizing the available body of knowledge and the guiding principle of the research, it can be assumed that the pharmaceutical market is ruled by specific conditions that shape marketing mix instruments in a qualitatively new way (different than that of consumer goods). Pharmaceutical companies form their marketing strategies and resulting marketing activities with due regard to specific properties, which means that the analysis and consideration of all specific conditions present on the pharmaceutical product market are vital preconditions for designing appropriate marketing strategies (Research Hypothesis). The aim of the research is to view the extent to which consideration of elaborated specific properties affects the strategic (and subsequently tactical) marketing decision-making of pharmaceutical companies in the Republic of Serbia. The nature of the issue, and also the comparatively small number of pharmaceutical companies that organize production on the territory of Serbia, have

prevented generalization based on large numbers, thus determining the research as qualitative in nature [18].

#### **4. The Subjects and Objectives of Research (Research Questions)**

The course of research so far, based on the analysis of secondary data sources and the available literature, has provided only partial replies to research questions: The analysis of the state of and tendencies in pharmaceutical industry has provided the basic picture of contemporary pharmaceutical industry. A brief historic overview from roots to present date has enabled the understanding of the industry's logic and possible routes of development. The analytic approach to determining the players in the micro and macro marketing environment has produced insights into the pharmaceutical industry and market in all its complexity, numerous stakeholders and, frequently, conflicting interests. The insights into the environment have enabled the detection and profiling of players forming the offer of pharmaceutical products and constituents of demand, primarily manifested through three key groups of stakeholders – consumers/patients, prescribes and health insurance payers, including the segment of expenditure on pharmacological therapies. The central section of the thesis deals with the analysis of marketing mix instruments, in an effort to elaborate on some of the key specific properties of marketing activities on the pharmaceutical market, distinguishing them from the marketing of consumer goods. The dilemmas, place and role of the marketing function and marketing strategies in the corporate strategy open the opportunities for primary research, which is to confirm or disprove the thesis that designing marketing strategy in pharmaceutical industry implies an analysis and consideration of a much broader spectrum of specific environmental factors. In addition to providing a cross section of the state of marketing practices on the pharmaceutical market of Serbia, the combined output of secondary and primary research will result in relevant conclusions that may be regarded as original contribution to the body of knowledge on marketing on this marketing. A research tool was designed for the purpose of gathering primary data [18] [19].

#### **5. The Research Tool**

The research tool selected for this thesis was a structured interview, comprising three sets of questions related to the following areas :

- definition of the target market;
- value proposition (marketing mix); and
- the evaluation of the place and role of marketing in pharmaceutical industry.

The motivation for such a setup of research structure has two determinants. The first is related to the fact that strategy is a comparatively permanent orientation of a

company, determining both its market positioning and the indications of the intended routes of development. On the other hand, reluctance of economic subjects in Serbia to contribute to research is proverbial, where evading questions at the operative level is regarded as safeguarding the integrity of the company and facilitates approach to respondents. Furthermore, only by insights into the attitudes and logics of thinking on marketing strategy and the place of marketing on the pharmaceutical market facilitates identifying the patterns that characterize this market in the given conditions, which would not be possible at the level of analysis of operative marketing activities. In addition to a brief introduction defining the purpose of research and clarifying the initial hypothesis, each research subject is divided into a certain number of issues representing its more detailed determination. The preliminary version of the guide was tested for comprehensibility and content in a panel discussion with three persons whose work is related to the pharmaceutical market, and suggestions were used for adjusting the wording, in view of the fact that persons responsible for marketing activities in pharmaceutical companies are predominantly physicians and/or pharmacists. The research tool was sent for inspection to potential respondents in electronic form prior to the interview. The surveying unit was comprised of persons directly responsible for the companies' marketing activities, with an influence on the design of marketing strategies. The interviews lasted for 60 to 75 minutes. Five interviews were recorded in digital audio format, whereas the other half of the respondents preferred not to have the interviews recorded this way [16][17].

#### **5.1. Changes in the Marketing Practices in Pharmaceutical Industry**

The most prominent issues raised under this subjects point partly to the wish of the participants on the pharmaceutical market in Serbia to see better regulated relationship and business conditions, and partly represent a view of the evolution in the marketing practices and the industry itself [19] [21].

- All respondents who participated in the research believe that the most significant change that they expect is regulation of the relationships on the pharmaceutical market in Serbia. Basically, this process is about harmonizing the country's healthcare system, pharmacy network, pharmaceutical industry and appropriate legislation. The prevailing opinion is that the process of changes will be inevitable in view of the European integration process [2].
- Reformed healthcare systems, sources of healthcare finance (basic and additional healthcare insurance), equalization of private and national institutions both in healthcare and in pharmaceutical system, and better control of drug sale are some of the key issues to determine future conditions on the pharmaceutical market in Serbia. From the point of view of the level

of service provided to final users, regulating the system should also rationalize the routes through which drugs reach consumers, eliminating intermediaries incapable of meeting required standards from the market competition. In the respondents' opinion, rationalized number of market participants will result in higher quality of service, better control of sale and preservation of the pharmacological properties of products in the chain from production sites to the place where they are used. Unregulated system has also resulted in numerous 'grey' routes by which drugs reach the patients. Although at the rear end of information revolution, consumers do not need Internet pharmacies to obtain prescription drugs without any obstacles. Ethical drugs can be purchased without prescriptions or any limitations in numerous pharmacies, but objectively, drugs are often available on open-air market stalls or through classified ads in local papers. A considerable number of drugs in the grey zone are of dubious origin and pharmacological properties, without package inserts and potentially harmful to any final consumer/patient. The unlimited availability of ethical drugs in the 'grey' zone also gives rise to forms of self-treatment that are dangerous for the patients' health, as they make diagnoses themselves or following advice of persons from immediate social environment, and chose therapies which will, in the best case, not produce either beneficial or harmful effects [2] [3] .

- The marketing practices on the pharmaceutical products in Serbia must be of higher quality. The respondents' opinion is that quality should be sought through reducing pressure on prescribes, where the industry's activities aimed at them should be more educational and less commercial by nature. Commercial pressures on prescribes include various form of gaining loyalty, room gifts, to financial stimulations, covering costs of seminar attendance, visits to fairs. Numerous commercial incentives are not contrary to legislative solutions, but there is a profound doubt in the ethicality of such actions. One of the respondents expressed the opinion that pharmaceutical marketing is about to face 'going back to the roots'. Explicitly, it refers to investing in partnerships and trust between pharmaceutical industry, prescribes and patients that characterized the early stages of application of marketing within the healthcare system [3] [8].

Respondents in the survey highlight prevention as a trend which will, in future, gain importance, in accordance with WHO's recommendations that each individual is responsible for his/her health. Prevention is achieved by raising the population's health culture and influence towards changing 'unhealthy lifestyles' [9].

- The development of biotechnology and genetic therapies will make the industry highly sophisticated.

In some respondents' opinion, man's ability to impact on the 'avoidance' of serious health problems through gene modifications will not mean the end of classical pharmacy and 'common' drugs. Minor health disorders, especially acute, will still be treated with verified therapies of low unit price, which basically guarantees a future for generic producers [10].

- Numerous mergers and acquisitions have marked the development of the industry in the previous period. One of the respondents in the research has expressed an opinion that this trend will end in the forthcoming period. Some of the systems have become too large and it is obstructing communication between various functional areas, as well as different geographical centers. The decomposition of gigantic systems is also heralded by the practice of large pharmaceutical companies, to seek efficiency of R&D by encouraging mutual competition between their own research centers.
- New markets – the most significant participants in the research are becoming aware of the limited potential of the domestic market and turning to new market, with a primary focus on Russia and the Commonwealth of Independent States, Asian and African countries, but, to an extent, also to adjacent markets of the EU or countries gravitating to it.
- Due to their broad product range and assortment, wholesalers have a specific insight into the sales of various categories of drugs. It is very interesting to identify trends, which cannot be regarded as exclusively characteristic of Serbian market, such as a rise in the sale of lifestyle drugs. According to one of the respondents, three key trends leading to a proliferation of products in the sphere of OTC preparations or auxiliary medicinal devices, are based on:
  - the desire for extended (or permanent) youth among the female population ('hyaluronic acid is the absolute hit'), but the trend is slowly extending to include men as well;
  - the desire of male population to preserve potency; and
  - desire to maintain ideal body proportion (weight loss products) [11].

The emergence of small domestic producers offering products from these groups reveals another fact, that it is a profitable industry, as the consumers are willing to allocate considerable amounts of money for these products. It is not uncommon that a consumer unwilling to pay the cost of an ethical drug against a 'mundane' disease does not complain of the household budget restraints when buying the 'youth potion'. There is a consensus among respondents that the future pharmaceutical market in this region will be better regulated, and that marketing is expected to make a qualitative move from 'commercial to educational'. Primary objectives mentioned by the respondents include true therapeutic quality of drugs, higher quality of

communication with prescribing physicians and pharmacists, and availability of drugs to patients [8].

## **6. Implementation of Research Results in the Practice of Pharmaceutical Companies in Serbia**

One of the conclusions that impose themselves is that the circumstances of the functioning of the pharmaceutical market in Serbia, in view of the presence of a large number of generic producers, and relatively modest size of the market, have resulted in the existence of very similar views of and considerations on marketing pharmaceutical products. A key difference is obvious at the operative level, as only the difference in available resources enables the full utilization of marketing activities, as well as the tactical tools for stimulating various participants generating the demand for pharmaceutical products. Only in one case, analyzing the company's SWOT matrix, the respondent pointed out that the lack of marketing strategy can be regarded as the company's internal weakness. Objectively, it is not about the total lack of defined market strategy, in view of the fact that the company is one of the leaders in the industry. The respondent formulated his view as insufficiently defined marketing strategy in the segment where it represents a unique competitive advantage of his company in relation to others. Thinking about marketing strategy is pragmatic, as his opinion is that this unique competitive advantage must be enforced in the form of measurable tender criteria, as 'nice and charming' cannot be evaluated numerically when submitting offers for supplying large healthcare centers that the company services. Such an opinion can support the conclusion that the marketing activities in pharmaceutical companies on the territory of Serbia are primarily operative. Marketing's advisory role in strategic decision-making at the company level is correct, but the interviews have lead to an impression that there is space for a more active inclusion of marketing in generating strategic decisions at the company level. Focus on operative, daily duties may also be the result of the complex and difficult conditions in which the industry functions in Serbia, balancing between imposed limitations, its own orientation to generating profit, and de facto present social and ethical factor. Summing up the way of viewing the target market and segmentation criteria, it is clear that production logic is present, where the target market is viewed through the prism of the product's characteristics and purpose, and the group of prescribes using the given products. The interviews have not identified a more complex way of categorizing prescribes according to specific behavioral properties or attitudes. Value proposition on the domestic market, unified in the synergetic effect of the product, pricing, distribution and promotion, enhanced with a set of services and user support, is perceived as the same as among competitors.

Criteria used for describing the uniqueness of one's own offer and advantage over the competitors are almost identical with all respondents [3] [8].

## **7. Conclusion**

'Marketing is a serious business.' As a rule, respondents agree that it is marketing that sells drugs. Despite recognizing and acknowledging the controversial nature of relationship between pharmaceutical industry and marketing, all respondents agree that marketing has its place, adding that, regardless of their products' clinical superiority, there is a need to convey information from the industry to physicians. The importance of marketing is additionally highlighted by the fact that a large number of producers with identical and/or similar offer are competing on a limited marketing, and targeting the same consumer groups [22]. Marketing activities become one of the dominant tools for encouraging physicians to prescribe a certain producer's drugs. The dominance of the operative level of marketing is prominent in several respondents' comment that marketing activities have no sense until the drug has reached wholesale and subsequently pharmacies, i.e. until the physicians start prescribing it. The logic of marketing, which is characteristic not only of the pharmaceutical market in Serbia, is predominantly based on promotional activities. Nevertheless, it must be pointed out that respondents prefer the opinion that this is in fact informing prescribes and other target groups, and regard the word 'promotion' as too 'blunt' for the type of activities that they conduct. For the 'average' consumer – the patient – oversized interest in pharmaceutical industry and the multitude of, often divergent, opinions on the benefits and/or dangers of drugs is a serious problem. Between the extremes that a drug may at the same be a means of returning an individual's life back to normal, but also a way of permanently disrupting the functions of the organism, and even threaten life, one may very easily find oneself in an endless succession of delights and disappointments. However, the very nature of the product and the circumstances in which the individual uses them mean that humanity will never be able to distance the selves from the industry. As long as it is an industry rather than something else. The discourse on the mutual relationship between marketing and pharmacy can only be concluded by a lengthy debate on ethics. Is the aim of clinical trials to prove the effectiveness and safety of a drug, or to meet criteria that will enable the drug's market launch? Is the purpose of information from pharmaceutical companies to raise levels of awareness of risks, symptoms and diagnostics of a disease, or is the primary motive to boost sales and/or market share? Is the risk factor a disease to be treated pharmacologically or not? Do physicians give balanced advice on alternative methods of treatment and a change of lifestyle in the patient's best interest, or is it in their interest only to prescribe pharmacological therapy? There are other products that may be harmful to consumers

if they are not produced and/or used appropriately, and other products that not everyone can afford, but there are few products that imply so many emotions, and so much pondering what is fair and what is not - from the human organism, nature, social environment. In the end, different cultures/societies have found different ways of rationalizing this controversy. Pharmaceutical industry has done a lot to objectively extend an individual's lifespan, but people still have a finite number of years at their disposal. The complementary advances in medicine have enabled man to live longer and think less about biological limitations, but there is no supreme, ultimate and final result, approaching the mythical ideal, of which each individual has the conception of what it should (or must) look like. Does such a position have a price that affects the pricing of a pharmaceutical product as well? It certainly does. But everything has a price. Marketing is the connection between R&D and the production of a pharmaceutical, and the target audience in its broadest sense [3] [8].

*If nothing else, marketing is what makes the pill taste less bitter.*

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