

West-Hungarian University

Faculty of Economics

**THE TRANSFORMATION OF THE
PHARMACEUTICAL MARKET IN
HUNGARY BETWEEN 2007 AND 2010,
IN THE VIEW OF THE
GYNAECOLOGICAL MEDICINAL
PRODUCTS**

Thesis of the Doctoral Dissertation (PhD)

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1. GOALS, HYPOTHESES

1.1. The background of the research

It is a constant challenge to the players of the Pharmaceutical Market (pharmaceutical companies and distributors) adapting to the continually changing market environments, and identifying the customer needs, and meeting the demands. The research and the writing of the dissertation was inspired by the appreciable huge transformation of the domestic Pharmaceutical Market. The coming of the Act XCVIII of 2006 on the General Rules for the Safe and Economical Supply of Medicines and Medical Equipment and the Distribution of Medicines (hereinafter “Medical Care Act”) into force, the raising of the general enlightenment and self-advocacy of the customers, thanks to the media mostly, and the obligate participation of the health sector on this market are all included. The Author's aim was to provide a comprehensive and updated picture to a modern and competitive pharmaceutical marketing communication. The issue was discussed simultaneously for the three active players involved in the drug-buying process, the patient, the doctor and the pharmacist.

1.2. Hypotheses

Doctors

H1: Due to the Medical Care Act, which was came into force in 2007 the doctor's prescribing habit has been changed:

- a. When selecting the refunded medicines, the price has a significant, crucial role.
- b. The frequency of recommendation of the over the counter medications by the doctors will be increased.
- c. The role of the medical representatives is decreasing.

H2: In case of the medicines with Social Insurance subsidies, the switching from a drug to another due to the price is a daily practice.

Pharmacists

H3: Due to the Medical Care Act the drug-dispensing and stockpile practices of the pharmacists are radically transforming. When dispensing a medicinal product, the number of substitutions are significantly increases.

Patients

H4: As time passes, the people's price sensitivity increases. More and more people are convinced that a cheaper generic product can be as effective and well tolerated, as a more expensive with identical composition.

H5: Since many product with the same composition is marketed, the manufacturer of the medicinal product will be the determinative for the people.

2. CONTENT, METHOD AND JUSTIFICATION OF THE RESEARCH

2.1. The content of the research

The thesis has two main parts: a theoretical overview and a detailed analysis of the results of primary research. Based on several national and international literature, the Author localizes the Pharmaceutical Market within the Health Care System. It describes the special intersection of health, health policy and the marketing, in which the Pharmaceutical Market takes place. Reviews the changes which enacted in Hungary from 2007, discusses the refunding system and compares it with the international practice.

The aim of the primary research focusing on the gynaecological products was to highlight how do the medicinal product consuming patients (inexpert), prescribing doctors, and the dispensing pharmacists live through these changes enacted in 2007, regarding to the prescribing possibilities, refunding, and availability of medicinal products. The Author's ambition was the mapping of the prescribing, dispensing, consuming patterns, and the determination of the continuously altering effective marketing strategies of the pharmaceutical companies on the tested specialty.

2.2. Method and justification of the research

The changes necessary for the preservation of the competitiveness on the pharmaceutical market vary widely by specialities and products. In the survey, the Author focused on the gynaecological speciality

only. So the gynaecologists and the female patients have been the respondents. In this way the variations of the different specialities could be eliminated.

2.2.1. Qualitative Research

The Author the exploratory qualitative research conducted among obstetricians-gynaecologists. These doctors were chosen, as they were in the crossfire of the Pharmaceutical Market activities for many years. Practically it depends only on them in every case, which prescription-only product falls into the patient's hands. The Author has assessed what extent the Medical Care Act induced changes raise those special questions, which were analyzed from all of the three directions (doctor, pharmacist and patient) during the quantitative research. Two qualitative researches have been done, one year apart, to assess both the short and long term effects during the quantitative research. During the qualitative research, the writer of the thesis hoped that opinions and emotions concerning to the reforms are also breaking to the surface, which could remain undetected by the questionnaires.

Both in-depth interviews and focus group technique were carried out by the Author. The **in-depth interview research** happened in the second quarter of 2008, and based on questioning of 22, randomly selected obstetricians-gynaecologists, practicing in Hungary. The **focus group** qualitative research happened on the spring of 2009.

The analysis has been happened among 8, randomly selected, obstetricians-gynaecologists, practicing in Hungary.

In-depth interviews and focus group discussions involved the same issues: the role of medical representatives and the opinion about them, the aspects of the drug-selection, effects of health reforms, the specialist's opinions about the changes, their attitudes to the OTC products, innovative products and the opportunities offered by the e-marketing.

2.2.2. Quantitative Research

The Author examined the short and long term effects of the reforms to the Obstetrician-gynaecologist specialists, pharmacists and patients in three **quantitative** waves:

- ✓ on the autumn of 2007 (half a year after the Medical Care Act),
- ✓ on the autumn of 2008 (one and half a year after the Medical Care Act),
- ✓ on the autumn of 2010 (3 years after the Medical Care Act).

The questioning of the obstetricians-gynaecologists, pharmacists and female patients have been happened personally and vocally. In the case of specialists the target population is the obstetrician-gynaecologist with special exam living and practicing in Hungary, while in the case of pharmacists the pharmacy managers graduated from Pharmacy in Hungary. The selection of the subjects happened from a computerized database. In case of professional questionnaires

the standard, without replacement, stratified, arbitrary (not random) sampling technique was used (Malhotra 2005). The Author reached the doctor and pharmacist subjects through her workplace relations. In case of patients she used a direct questioning in pharmacies. During the visits at the pharmacist, she usually interviewed a customer woman, too. Due to the more accurate results, during the newer and newer occasions, and with the growing experience, the Author has tried to increase the number of elements. Later, in case of the statistical methods used for the analysis, the results were not influenced by the different number of elements. Although the questioning in all cases, in all the three target groups happened nationwide basis, the resulted samples could not always considered to be representative.

The personal interviews with the questionnaire in all three target groups directed the same issues, from the point of view of the affected subjects. The Authors questioned the activity and influencing role of the pharmaceutical companies, the aspects of the drug-selection of the affected subjects, their opinion about the OTC products, and the trading of these medications out of a pharmacy. Inquired about the impact of reforms, the generics, the acceptance of drug substitutions, and last but not least the awareness of the possibility to obtain information in electronic way, and the utilization of it. Besides she has tried a target group-specific fact-finding as well. By this is meant the professional reasons of the aspects of the drug-selection, the activity of the pharmaceutical companies, the role of the medical representatives, the suggestion of the drugs without

prescription, the frequency of the switching, and the use of the prescription writing software of the National Health Insurance Fund. The Author paid special attention to the drug-dispensing and stockpile practices of the pharmacists, while in female patients mapped whose opinion counts in health issues, how typical the self-medication is, what is the impact of TV advertisements, newspaper ads and flyers on drug consumption habits. The quantitative research has happened mainly in the form of closed questions.

3. RESEARCH FINDINGS

3.1. Findings of the qualitative and quantitative research

In the research it was proved that in the people's view in drug-related issues the primary determining factor is still the doctor's opinion. In the past few years the assessment of pharmacists, who was ranked on second place has been improved in the common knowledge and price sensitivity was increased too. The initial problems were clarified, and the patients have become increasingly open to the decisions about their treatment.

T1: Due to the health reforms in 2007 the doctor's prescribing habit has been changed, but based on the results of the research it can be stated, when selecting a medication, still the professional aspects remained the primary.

T1a: The role of the price has been increased and the gynaecologist specialists became more sensitive to the price, but the rate of it is far below the expectations of the Author. The price sensitivity reflected rather in the better consideration of the financial situation of the patients. The consideration of the costs of the therapy was mainly increased in case of the refunded medicinal products, but a little later it has been true for the products that were not covered, too.

T1b: The number and frequency of suggestion of the drugs without prescription has been increased. One of the reasons of this the avoidance of the administrative burden, another reason is the elimination of the official controls.

T1c: Amongst the professional information sources, the medical representatives still remain on the first place. Comparing the three waves of the quantitative research, the relationship and interdependence between the doctors and medical representatives further intensified in time, and the acceptance of the medical representatives increased.

T2: In case of the drugs covered by the social insurance system, there was no drastic change due to the effects of the Medical Care Act. In short term the Regulation had a major influence on the prescribing habits of the physicians. There have been switching due to the price, but as time passed, the professionals experienced that the Authorities were not so stringent, and frequency of this was decreased. The majority of the doctors stuck to the usual, well-established products, which they already had their own experience with.

T3: There are more and more products on the market, and the pharmacy's sales offer is more typical. The everyday drug orders, the continuously growing drug supply and the frequent, however decreasing price changes in extent over time (for the refunded products only) resulted in decreasing stocks in the pharmacies. Although the substitution with cheaper products is expected by the Government, there are no communicated sanctions to the direction of the pharmacists. One reason of this perhaps that the margins, which are below of that the usual in Europe, and the increased competition due to the increasing number of pharmacies, with no excess burden

wanted to impose on pharmacies. The dispensing is determined by both the stock in the officina, and the price, which has to be paid by the patient. Only half of the pharmacies confess that the patient will get, which was written for. As time passed however, this proportion has not changed.

T4: By 2010, the proportion of those who are confident that a cheaper product can be as effective as a more expensive one, is increased. The number of subjects who willing to switch to a product with similar composition for the more favorable price is increased.

T5: The importance of the reputation of the pharmaceutical companies initially increased, but as time passes eventually faded. The people realized that even the product of a previously unknown company can be effective. This may be due to the fact, that there was no company at all, who could break the people's stimulation threshold through succesfully and permanently. There are efforts, because a number of issue advertising campaign was launched, sponsored by pharmacy companies, but none of them has achieved striking results.

3.2. New and novel scientific results

The primary research methodology which constitutes the basis of the thesis is novel. The Author applied simultaneous primary research horizontally and longitudinally. Three-pole questionnaire was used to examine the opinion and experience of the prescribing physicians,

dispensing pharmacists, and the drug consumer patients, regarding to the Medical Care Act, enacted in 2007.

The new and the novel information in content are the following:

1. A novel finding that the most important information sources for the obstetrician-gynaecologists and pharmacists are the medical representatives and pharmaceutical sales representatives. It can be said that the personal contact is the most important link between a pharmacy company and the professionals.
2. It is a new result of the research, that despite the regulation of the refunded medicines, the cost does not play primary role in the selection of the medications.
3. It is new, that the prescribing habits of the gynaecologists hardly influenced by the nature of manufacturer. The doctors should be taught by the companies taking into account the manufacturer's added value so they could choose, when they stand face to face with two products, with nearly identical prices. The building up and strengthening of the company's image becomes vital in long-term. By the opinion of the Author this is a major direction and strategic potential from the manufacturer's perspective.
4. It is a new result, that the specialist physicians also like to recommend an OTC medication to their patients.
5. Novel finding is that the manufacturers should encourage the pharmacists to recommend a substituting gynaecological product, because of the increasing rate of the use of alternative products, and the people's increasing willingness to the switching.

As the pharmacists are obliged to substitute the prescribed medication with a more affordable generic, it is the interests of the manufacturers distributing nearly on the same price to provide the pharmacies with an appropriate product, which could be an alternative for exchange, and they must calculate upon the decreasing margin-mass as well, due to the favorable price (excellent way for the compensation of this the rebate for pharmacies).

6. Novel discovery that the monitoring over the household drug-collections should be followed with attention by the manufacturers and pharmacies. It is useful suggesting to the households some basic products (such as antipyretics, and painkillers), and periodically check for any potentially remained, surplus medications, which could be dangerous on arbitrary use (e.g. opened antibiotics, and remnant tablets of previously switched antihypertensives due to professional reasons) and draw attention to the monitoring of expiry dates as well.
7. It is not a new result, but confirms the previous researches, that in drug-related issues the physicians is continued to be the most important channel of the communication with patients.
8. A new result is that the opportunities afforded by the advanced information technology in the health sector can be effectively exploited, if the pharmaceutical companies invest time and effort to prepare our country for the use of new communication channels, in case of the professionals and the in experts as well. In case of the medicines can be obtained without prescription

and the prescription-only product as well, the advertising, promoting and teaching of the use of the innovative and flexible communication channels should be considered by the pharmaceutical marketing professionals as a long-term profitable investment.

4. CONCLUSIONS AND RECOMMENDATIONS

The Author's suggestions were formulated in relation to the refunded, systemic vaginal antifungal active substances, which are belonging to the fixed substance-group, and are feeling the impact of the Medical Care Act the most intensively.

At the time of the segmentation of the professional target group, beside the obstetricians-gynaecologists the prescribing rate is low in the above mentioned areas of specialities (urologists, diabetologists, oncologists, dermatologists, general practitioners), but by the Author's opinion, in the future it would be appropriate to target them as well. In regard to the shrinking of the market of systemic antifungals, and the increasing number of players within this shrinking market, the targeting of the previously untouched specialist with the utilization of the individualized, targeted marketing communication possibilities, is a good opportunity to replace the lost prescriptions.

It could be profitable, if the manufacturers of the systemic urogenital antifungal active substances focusing their medical representative's activity primarily on those gynaecologists, who have many patients, working in outpatient offices, and preferring the oral or combined treatments. The price sensitive professionals should be convinced about the price/value ratio of the product, while in case of the doctors focusing on the professional merits, the main target is the supporting of the efficiency, ease of use and safety. Clinical trials for

marketing purposes make it possible to support the effectiveness of a medication with domestic experience.

Once introduced, in case of the products being in the common knowledge, it is important to maintain brand awareness. Prescription could be obtained with keeping the former prescribers, and winning the others over the switching. In addition, another possibility is the detection of untreated cases. With screening and patient education the untreated cases up till now could be discovered.

In the competition of lots of medications with identical active substances and nearly on the same prices, the building up the company's image becomes vital in long-term. Compared to the previous practice, a new, and clear direction for the maintenance of the competitiveness is the effective online presence.

Since the Medical Care Act came into force, due to the fixed price and price competition, the pricing strategy became as an unmissable element of the marketing strategy.

In order to continuously improve the efficiency and preserve the competitiveness of the pharmaceutical companies market research should be done to explore the market trends, the assessment and activity of competing firms, the achieved goals of the delivered messages, the customer's demands and attitudes, and the specific, drug-related perceptions.

The most significant change in the period between 2007 and 2010 was perhaps the appreciation of the role of pharmacies. Nowadays it is not enough to convince the prescriber only of the effectiveness of a product, but actively must be done something for the desired drug would be placed actually into the patient's hands. The pharmacy companies needs to obtain information via the pharmaceutical sales representatives about the pharmacy's inventory and dispensing practices, and the activity of the competitors. Depending on the acquired information, the sale offers and rebates should be considered individually for each pharmacies. In the future these will be the most effective tools that the company's products would be present in the pharmacy, and becoming for substituting products within a given drug class. Regarding to the offered advantages particular emphasis should be placed on the monitoring of price-margin and income deficits, and the compensation as well. In case of the pharmacists too, the personal contact is more important than ever. In the tested period there was an increased risk for the suggestion of another medicine to the patient by the pharmacist, instead of the prescribed one. Taking into account that the role of the additional services provided by pharmacists is appreciated, the manufacturers should focus on the supporting of the Pharmaceutical Care.

The most affected segments of the patients with vaginal fungal infection is the women of childbearing potential. The manufacturers should be more open into the direction of the inexperienced target groups than ever. For expanding the market the improving of inexperienced's

knowledge is the task of the pharmaceutical companies. The pharmaceutical companies must have an essential role in improving patient's compliance, too. Do not ignore the fact that the final decision about the specific, purchased medicine in many cases is in the patient's hand. It depends on her/him whether ready to switch the medication, or insists on a brand. Those market participants providing the doctors and pharmacists such leaflets containing the image of their product and brand names, which could be given in addition to the prescription or the dispensed medication, aid the task of the profession, improve the quality of care, and finally could prevent a possible substitution. If the brand name is not written on the prescription only, but an additional service is connected to it by the manufacturer from several directions, the commitment to the product will be increased by this means even there, where the role of the primary decision maker was decreased.

The manufacturer's modern and efficient marketing strategy should lay emphasis on the physician, pharmacist and patient simultaneously. It is important that the activity and communication towards the three target groups should be coordinated and complement, and reinforce each other. Those pharmaceutical companies which recognize this and adapt to the changes, will have success in the future.

5. THE AUTHOR'S RELATED PUBLICATIONS

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