



# EXPLORING PATIENT, PHYSICIAN, AND PHARMACIST PERSPECTIVES ON THE SUBSTITUTION OF BRANDED MEDICATIONS WITH GENERICS IN COMMUNITY PHARMACIES: A COMPARATIVE ANALYSIS

Andreea Pereanu

<sup>1</sup> Faculty of Medicine, University "Ovidius" of Constanta

Andreea Pereanu

email: andreep.29@yahoo.com

## ABSTRACT

*This paper evaluates the influence of a number of factors taken into account when a branded drug is replaced by a generic. It also assesses the responses of healthcare professionals - doctors and pharmacists - and patients on the issue of replacing the two classes of medicines. We compared their responses to identify new points of cooperation for the desired benefit of the patient. Thus, we extracted information from all three groups, consisting of 10 doctors, 10 pharmacists and 50 patients. We gathered information on age, residence, income level and education level for patients, as well as age and experience of specialists. Based on the survey responses, replacing the original drug with a generic one raises many issues, such as lack of information for the patient and specialist, lack of collaboration between doctor and pharmacist, ineffective communication between specialist and patient, and the influence of the general problem related to profit.*

*Keywords: original, generic, pharmaceutica, patient opinion*

## Introduction

Prescribing, dispensing and purchasing medicines are influenced by many factors and sometimes attempts to find the best approach can affect the relationship between the doctor/pharmacist and the patient, who should be the primary beneficiary of health services (1). All the more so as the health system in our country was underfunded, and Romania has a high hospitalization rate compared to other European countries (2).

The switch from brand names to generic medicines is increasingly common nowadays, fluctuating in the pharmaceutical environment,

which is continuously changing due to changing economic and social conditions. At the same time, many original medicines have lost their patent/license, resulting in the disappearance of the original medicine and increasing reliance on generic medicines (3).

The original formulation is initially discovered and developed by a pharmaceutical company and once approved for marketing, the company can market and sell the "original" product exclusively under patent in order to recoup the R&D funds and acquire the net profit (3, 4).

Once the licence for a particular product expires, it is eligible to be converted into a

"generic medicine". Because generic medicines can differ in colour, taste, shape, inactive ingredients, preservatives and/or packaging, generic manufacturers usually have to file additional documents with the authorities to demonstrate that their medicine is manufactured in accordance with good manufacturing practice, that it is as pure and stable as the original medicine, and that bioequivalence tests show the same pharmacokinetics, i.e. it should dissolve and be absorbed at the same rate and to the same extent as the original product. Specifically, the generic form must act in the same way as the patented drug by the same mechanism and must follow the same pattern of absorption, distribution, metabolism and elimination from the body (4, 5).

However, replacing the original drug with a generic form is a difficult choice in some cases for both the doctor and the patient, on the assumption that the generic may not offer the same quality as the original, as reflected in its lower price. The lower price, of course, is explained by the fact that the generic manufacturer does not need to invest in clinical research and marketing of the new product. In addition, the fact that many pharmaceutical companies are generic producers leads to competition and lower prices (6, 7).

Sometimes patients complain about the increased incidence of side effects when switching to a generic drug and the therapeutic ineffectiveness that is often reported by them to their doctor or pharmacist. However, a lack of pharmacovigilance reports and an increased number of research studies do not demonstrate significant differences in the efficacy of generic drugs.

Ongoing information on the comparison of originator and generic medicines is essential for physicians when they choose to prescribe either the generic or the branded medicine, as the therapeutic efficacy/efficacy and safety profile of each can be considered.

A better understanding of the issues facing the pharmaceutical market, including the unavailability of original branded medicines, and continued collaboration between doctor and pharmacist could alleviate patient concerns about purchasing the recommended medicine. Other issues such as stabilising the patient with a particular treatment, ensuring adherence to the

prescribed medication and taking into account the patient's financial situation should not be neglected. However, the campaigns conducted towards the promotion of different generic drugs, together with the relationships between the physician/pharmacist and the medical representative, could lead to the use of drugs that are not optimal for treating the patient's needs (8, 9).

Pharmacists are the last link in the chain that requires well-regulated dispensing rules, but the current financial problems (delayed payments by the National Health Insurance House) may compromise ethics. For example, patients' access to information about medicines through the media and their financial limitations may lead them to pressure their pharmacist, frequently requesting certain medicines without first consulting their doctor or health specialist.

The aim of this study was to quantitatively analyse the responses of healthcare professionals - physicians and pharmacists - and patients on the factors influencing switching from an original to a generic medicine. We conducted a comparative analysis of the responses of patients, doctors and pharmacists in the hope of improving the relationships between these three groups, and thus to achieve greater benefit for the patient.

## **Materials and Methods**

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The study was conducted in Mihail Kogălniceanu commune, in Constanta County, with patients coming to a community pharmacy, to observe how rural people perceive this link between original and generic medicines. The study was carried out during the two months March 2023-April 2023 by distributing questionnaires about original and generic medicines to health professionals and the general public. The sample includes three groups of 10 doctors, 10 pharmacists and 50 patients, taking into account inclusion and exclusion criteria respectively.

Table 1 Study population

Patients	Health professionals
<p>Inclusion criteria</p> <ul style="list-style-type: none"> <li>- Age over 18</li> <li>- Romanian nationality</li> <li>- Persons wishing to take part in this study</li> </ul>	<p>Inclusion criteria</p> <ul style="list-style-type: none"> <li>-People who practice the job (doctors and pharmacists)</li> <li>-People practicing medicine in Consanta County</li> <li>-People wishing to take part in this study</li> </ul>
<p>Exclusion criteria</p> <ul style="list-style-type: none"> <li>-Persons with mental disorders that do not allow them to complete the questionnaire</li> <li>- People who cannot read</li> <li>-People who do not wish to take part in this study</li> </ul>	<p>Exclusion criteria</p> <ul style="list-style-type: none"> <li>-People who do not wish to take part in this study</li> <li>-Persons who do not practice the profession, although they have completed specialized studies</li> </ul>

As a working tool we chose three different types of questionnaires, one for each type of participant - doctor-pharmacist-patient.

50 patients completed a questionnaire with information collected on age, residence, education level, income level, along with 8 additional items used to assess patient behavior. It included:

1. The difference between the original and the generic medicine (if they did not know the difference, they were informed at the time they were given the questionnaire).

2. Differences in health status when switching from an original to a generic drug.

3. Effective use of generic drugs in their treatment.

4. The main source of information to consider when buying medicines.

5. The importance of medical advice when buying medicines.

6. The influence of drug cost when choosing between an original and a generic drug.

7. The problem of not being able to buy a specific drug used in his treatment.

8. Whether the switch from the original medicine to the generic is based on a specialist recommendation or other sources of information.

Ten doctors were included in the study. In addition to information on age, experience and type of specialty (medical or surgical), 8 items were used to assess their behavior:

1. The difference between an original and a generic medicine.

2. Therapeutic efficacy and incidence of

adverse reactions of the original and generic drug respectively.

3. Safety profile of the generic drug.

4. Previous medications administered to his patients and their effectiveness.

5. The patient's financial situation together with guidance to a generic drug.

6. Relationship with the medical representative and his/her influence when choosing to prescribe a medicine.

7. Cooperation with the pharmacist when switching from the original to the generic drug due to lack of drugs on the market.

8. Previous experience of the patient's attitude about how to use the generic drug.

Finally, 10 pharmacists completed the questionnaire. Apart from age and experience, 7 items were taken into account to assess their attitudes:

1. The difference between an original and a generic medicine.

2. Therapeutic efficacy and incidence of adverse reactions of the original and generic drug respectively.

3. Previous experience of the patient's preferences on how to use the original or generic medicine.

4. The importance of medical recommendations when issuing the prescription and the previous treatment received by the patient and its effectiveness.

5. The influence of the patient's financial situation when administering an original medicine and advice on alternatives to the original medicine.

6. The relationship between the medical representative and the financial profit of the pharmacy and the influence of these factors on the dispensing of medicines

7. The lack of original medicines on the pharmaceutical market, the impact of this lack and how the relationship between pharmacist and patient is affected.

## Results

Quantitative analysis of the responses given by the evaluated peers.

The patients who responded to the questionnaire are aged 25-70, all live in rural

areas, with a monthly income between 1000-4000 lei. 25% were secondary school graduates, 25% were high school graduates, not higher education graduates and 50% were university graduates. Of all patients, 76% knew the difference between original and generic drugs and 60% considered that significant differences occur when changing treatment from an original drug. 65% of patients noted that the generic drug they used was not as effective as the brand name drug. 70% of patients consider their doctor to be the most important source of information, 20% trust their pharmacist's recommendations, and the remaining 10% go by other people's recommendations and the drugs featured in the media. Most of them rely on doctor's recommendations, and only 5% of them consider that the doctor is not so well trained to trust them to treat the symptoms they need. Regarding the cost of the original medicine, many patients consider this an important factor in choosing between the two types of medicine. 65% of patients do not agree with replacing the original medicine, and this percentage includes patients who have never replaced the original medicine and patients who have tried a month or 2 months of treatment with a generic medicine and felt that it affected their health or did not have the same effect as the original. The remaining 35%, because of their financial situation, want to replace it with the generic (these are patients with a chronic diagnosis, who pick up their prescription at the pharmacy every month and for whom the price difference between the two types of medication matters quite a lot to them). As for the statistics on the factors that lead patients to switch from an original to a generic drug - 60% are pharmacists, 30% doctors, and 10% other factors not related to specialists.

The doctors who participated in the study are aged 38-65 with more than 10 years' experience. All physicians have non-surgical specialties and are familiar with the concept of original vs generic drugs and the differences between them. According to the doctors, there are differences between the therapeutic efficacy and incidence of side effects of the generic drug. 25% of them responded positively to this item, while 75% believe that the original medicine represents a better safety profile. All doctors took into account the previous treatments given

to the patient and their effectiveness, but 45% of them did not take into account their financial situation when prescribing some medicines. 70% answered that their relationship with their medical representatives does not influence their prescribing of medicines, and 30% mentioned that this is very important. 40% of doctors communicate with pharmacists when prescribing an original or generic medicine, but a significant 60% of doctors do not communicate with pharmacists. 65% of doctors are aware of the lack of original medicines on the pharmaceutical market, but this has not influenced them to prescribe generic medicines.

The last group analysed, pharmacists, are between 25-50 years old with more than 1 year experience. They understand the concept of original and generic medicines and the differences between them. 70% of pharmacists believe that there are differences between the therapeutic efficacy and the incidence of adverse reactions of the two types of medicines. Looking at previous experiences, 80% of pharmacists noted that patients prefer original medicines. All pharmacists surveyed informed patients about alternatives to original medicines, but 20% did not take into account the recommendations made by the doctor. 95% of pharmacists took into account the financial situation of patients and guided them towards alternatives they could afford. The previous treatment used by the patient and its effectiveness were important factors that 90% of pharmacists took into account when issuing prescriptions. The decision, when they had to choose between an original and a generic drug, was influenced by the relationship between the medical representatives and the financial profit of the pharmacy for only 20% of pharmacists, while 80% ignored this aspect. 60% of pharmacists felt that the lack of original medicines in the pharmaceutical field affected their relationship with the patient, 20% a little and 20% very little.

## **Discussions**

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Comparative analysis of the responses of the three groups.

The patients interviewed lived mainly in rural areas. The majority of patients were

university graduates, which is reflected in their knowledge of original and generic medicines respectively, as well as their information about alternative medicines available on the pharmaceutical market. Patients were concerned about the difference in cost between the two classes of medicines, believing that generics are less effective than patent medicines, leading to a higher occurrence of adverse reactions.

This idea was also supported by the doctors and pharmacists interviewed, who were not well informed about current bioequivalence studies, with both groups believing that there were significant differences between the two types of drugs. Because of the reluctance of doctors and pharmacists to recommend switching from an original to a generic drug, patients become reluctant. Also, the price of medicines has influenced some patients to choose a generic, even if they are not convinced that the choice they have made is the best one. While this factor was quite important for patients, doctors did not take their financial situation into account when prescribing a drug, believing in the stronger efficacy of the original drug.

Although the main sources of information for the patient were the doctor and pharmacist, a significant percentage took into account recommendations made by other people or by the media. Such information could be unreliable and could lead to pressure on the doctor and pharmacist to prescribe or recommend less appropriate for the patient's particular pathology. From my results, both doctors and pharmacists have taken into account the treatment previously used by patients and adherence to treatment, which is of real benefit to patients, especially those who generally listen to advice from healthcare specialists.

The current lack of original medicines was a concern for all three groups evaluated. Although doctors were informed about unavailable products, lack of collaboration with the pharmacist can lead to the doctor prescribing a less desirable drug and thus a significant number of patients face the problem of not being able to afford treatment. As difficulties in acquiring medicines increase, patients may become less confident in the pharmacist's services. Pharmacists have responded to this dilemma

by indicating that it can seriously affect their relationship and collaboration with the patient. Pharmacists advised their patients on alternative medicines, and a representative proportion took up the recommendations. Given that the majority of patients surveyed reported that switching from a brand-name to a generic medicine was done on the pharmacist's recommendation, and given that pharmacists generally do not collaborate with doctors, the patient-physician relationship may be affected.

## **Conclusions**

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This study presents some of the factors that influence the substitution of an original drug for a generic. This paper concludes that this switch is often not an option, but rather a necessity. The study also highlights the problems currently facing the pharmaceutical market, such as lack of information for both patient and professionals, lack of collaboration between doctor and pharmacist, ineffective communication between professionals and patients, and sometimes financial benefits for health professionals who place patients' needs as secondary, when in fact they should be the primary beneficiaries of healthcare services.

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