

PHARMACISTS' ATTITUDE AND PRACTICES ABOUT DRUG DISPENSING IN ROMANIA

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Abstract

The promotion, prescription and dispensing of drugs are influenced by a series of factors and attempts to face dilemmas often distance companies, physicians or pharmacists from patients, those who are supposed to be the main beneficiaries of healthcare services. The purpose of the study was to identify pharmacists' practices regarding drug dispensing. A number of 72 pharmacists from independent pharmacies have answered a survey about practices of drug dispensing to patients. Variables like age, work environment (urban, rural), length of employment have been taken into consideration. Results pointed out that a total of 98.61% of pharmacists counsel patients on alternatives in what concerns brand names. 96.87% declare that their relationship with the healthcare representative is an important criterion in the dispensing of a particular RX drug, while the relationship with the doctor is important for over 75% of pharmacists. In what concerns continuing education and training, over 60% of those surveyed bear the expenses of their trainings. Over 75% consider the patient's financial contribution when dispensing a drug. In conclusion, drug dispensing by pharmacists is influenced by a series of factors including healthcare policies, the relationship with the medical representative, or a desire for profitability.

Rezumat

Promovarea, prescrierea și eliberarea medicamentelor sunt influențate de o serie de factori și, adesea, încercările de a face față dilemelor îndepărtează companiile, medicii sau farmaciștii de pacienți, cei care trebuie să fie principalii beneficiari ai serviciilor de sănătate. Scopul studiului a fost identificarea practicilor farmaciștilor cu privire la eliberarea medicamentelor. Un număr de 72 de farmaciști din farmacii independente au răspuns la un chestionar cu privire la practicile de eliberare a medicamentelor către pacienți. Au fost luate în considerare variabile precum vârstă, mediul de lucru (urban, rural), vechimea în muncă. Rezultatele evidențiază faptul că un total de 98,61% dintre farmaciști consiliază pacienții asupra alternativelor în ceea ce privește alte denumiri comerciale. Un procent de 96,87% declară că relația pe care o au cu reprezentantul medical este un criteriu important în eliberarea unui anumit medicament RX iar relația cu medicul este importantă la peste 75% dintre farmaciști. În ceea ce privește formarea continuă și perfecționarea, peste 60% dintre farmaciștii chestionați își susțin formările din resurse proprii. Peste 75% țin cont de contribuția financiară a pacientului în eliberarea unui medicament. În concluzie eliberarea medicamentelor de către farmaciști este influențată de o serie de factori, printre care politicile de sănătate, relația cu reprezentanții medicali sau dorința de profitabilitate.

Keywords: pharmacist, drug, dispensing, ethics

Introduction

Many studies in the specialized literature prove that doctors' and pharmacists' exposure to promotional campaigns leads to a rise in prescription rates [1]. With very rare exceptions, direct exposure to campaigns conducted by pharmaceutical companies' results in: the frequent prescription of the promoted medicine, a price increase and a decrease in the quality of prescriptions. Many studies identify a risk in what concerns the quality of prescriptions *per se*, and raise a question about the veracity of drug prescriptions [2, 3]. Some authors identify the necessity of an applicable guide of ethical principles, to guide the physician in

his professional relationship with pharmaceutical companies, and which will evaluate the impact of the close connection between the physician and the "commercial market", determined by insinuating ways of influence: sponsoring research (but how else could it be carried out?), continuous medical education (extremely expensive, given the extraordinary development in some fields of medicine (but how else could it be covered?), or the need to always be up to date [4]. In this situation, both the physician and the pharmacist undergo a dilemma: either to respond to the patient's interest regardless of other circumstances, or to model their actions depending on the requirements of healthcare policies (rather, the constraints of

healthcare policies), on the “amenities” promoted by pharmaceutical companies. “The physician who, in his relationship with the patient, allows for his personal interests or the interests of a third party to prevail does not act in the interest of the patient, but in the interest of a different party” [5].

This dilemma, to respect the limitations imposed by healthcare policies, but also to offer the patient what is most adequate for him, is also encountered in the case of pharmacists. Pharmacists are the final link in this chain, having well regulated codes of practice, but financial problems (late payments by the National Health Insurance House, eroded profit margins) sometimes require certain ethical and legal barriers to be overcome in drug dispensing.

The current legislation in Romania conforms to EU regulations, but we must also take into account the specifics of the domestic system, as there is yet no culture of health. Patients receive information about medicine through several channels, and they are under the pressure of advertising in pharmacies; however, in their turn, they put certain pressure on pharmacists, frequently requesting the dispensing of prescription drugs without their physician's approval [6].

The objectives of the present research study were: a quantitative analysis of pharmacists' responses regarding the items presented above; a comparative analysis of results regarding statistical data like gender and urban/rural area of work; identifying correlations between the items of the questionnaire and work experience as pharmacists, age and years of work.

Materials and Methods

A number of 72 pharmacists from independent pharmacies from Eastern part of Romania answered a survey about practices of drug dispensing to patients. Questionnaires were voluntarily filled in by the subjects after being informed and after signing the informed consent. The study was approved by “Gr.T.Popa” University of Iasi.

Variables such as age, work environment (urban, rural), length of employment were taken into account. 8 items were defined in order to identify pharmacists' behaviours:

1. I only dispense the drug with the reference price;
2. I counsel the patient on alternatives in what concerns other brand names;
3. My relationship with the medical representative is an important criterion in dispensing a certain RX drug;
4. My relationship with the doctor is important in dispensing a certain RX drug;
5. By which means do you cover the cost of your continuing education and training:
 - a. Pharmaceutical industry sponsorship,
 - b. Sponsorship from the employing institution,
 - c. National and international projects/grants,
 - d. My own resources.
6. When counselling the patient, I take into account his financial contribution;
7. Drug dispensing is determined by disbursements from the National Health Insurance House;
8. I recommend OTC products and supplements, complementary to the treatment of the given pathology.

SPSS program was used in order to analyse statistical data, *t test* for independent samples and Spearman correlation.

Results and Discussion

The pharmacists were aged from 24 to 68 (with an average age of 38 ± 10.57991), with an experience in the pharmaceutical field ranging between 1 and 48 years of work (14.4265 ± 11.30489).

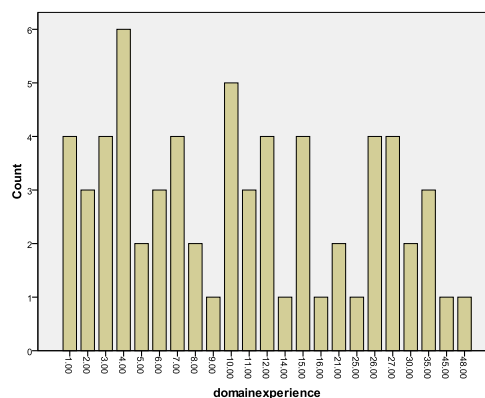


Figure 1.

Distribution of pharmacists according to their experience in the pharmaceutical field

From the total of questioned subjects, 91.67% were female, and 90.28% of all surveyed pharmacists worked in an urban environment.

Regarding the first item *I only dispense the drug with the reference price* results emphasize the fact that 16.67% never dispense only medication with the reference price. 29.17% declare they do so rarely, 48.61% claim they do so often, and 5.56% declare they always dispense only drugs with the reference price.

The answers to the second item *I counsel the patient on alternatives in what concerns other brand names* show that 69.44% of the pharmacists claim that they always counsel the patient on alternatives in what concerns other brand names, while 23.61% claim they often do this, 5.56% sometimes, and 1.39% never counsel the patient. It is pointed out that a total of 98.61% of pharmacists offer patients alternatives.

Pharmacists have also been questioned on the importance of their relationship with

pharmaceutical representatives and doctors for drug dispensing. 28.13% of pharmacists claim that the relationship with the pharmaceutical representative is not an important criteria for dispensing a certain RX drug, 21.88% declare that this is often important, 46.88% claim that this may sometimes influence their decision, and 3.31% declare they never take into account their relationship with the medical representative when dispensing drugs. We emphasize the fact that a total of 96.87% of pharmacists consider that their relationship with the medical representative influences them in the process of drug dispensing.

Concerning the item *My relationship with the doctor is an important criteria in dispensing a certain RX drug*, the distribution of answers is detailed in Figure 2. Only about a quarter of the respondents (24.29%) claim they are never influenced by their relationship with the doctor.

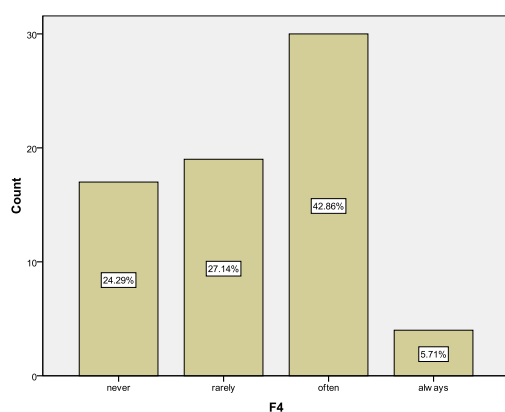


Figure 2.

Distribution of answers to the item *My relationship with the medical representative is an important criterion in dispensing a certain RX drug*

Pharmacists have also been asked about the way in which they cover the cost of their continuing education and training: sponsorship from the pharmaceutical industry (38.45% never, 18.46% rarely, 26.15% often and 16.92% always), sponsorship from the employing institution (31.25% never, 32.81% rarely, 26.56% often and 9.38% always), national and international projects/grants or their own resources (10.29% never, 26.47% rarely, 26.47% often and 36.76% always). Over half of the surveyed pharmacists most often cover the cost of their continuing education and training by means of their own resources.

For the item *When counselling the patient, I take into account his financial contribution*, only 11.11% of pharmacists declare they never take this into account, while 77.77% claim they take it into account in most cases or always.

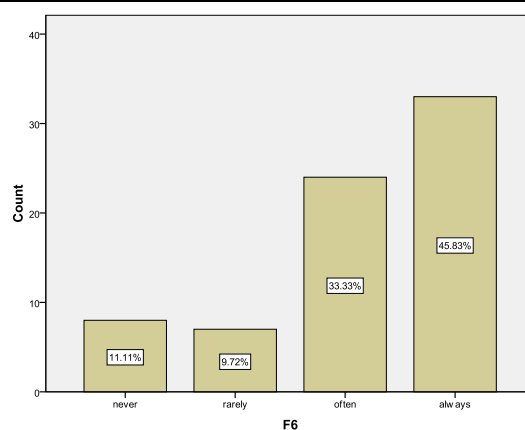


Figure 3.

Distribution of answers to the item *When counselling the patient, I take into account his financial contribution*

Pharmacists were questioned also about their opinion regarding the disbursements from the National Health Insurance House. 15.28% of the subjects answered that they never take this into consideration. Almost 85% declared that they take it into consideration and the distribution of answers is presented in Figure 4.

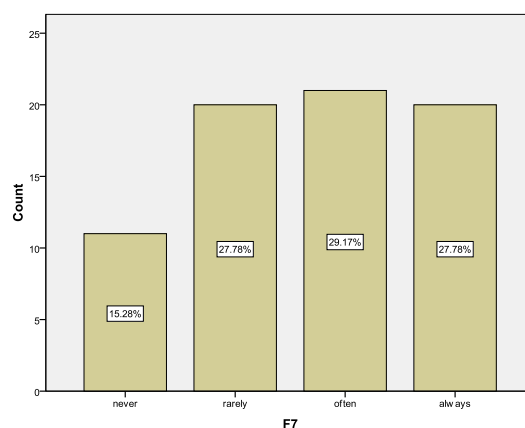


Figure 4.

Distribution of answers to the item *Drug dispensing is determined by disbursements from the National Health Insurance House*

Concerning the item *I recommend OTC products and supplements, complementary to the treatment of the given pathology*, 45.83% declare they often do this, and 34.72% - always. No pharmacist has declared that he/she never does this.

Comparative analysis

A comparative analysis of the results considering variables like gender and urban/rural working area was performed using *t test* for independent samples. The results revealed a strong positive correlation between male/female subjects considering the following variables:

- the relationship between pharmacist and doctor regarding the prescription of a specific drug ($t = 2.534$, $p = 0.014$). Male ($M = 3.2000$) subjects consider that this criterion is more often used, compared to females subjects ($M = 2.1905$);
- the way of obtaining sponsorship for training and continuing education ($t = 2.457$, $p = 0.017$), in order that female subjects considered less frequent the pharmaceutical industry support ($M = 2.1379$) comparing to male subjects ($M = 3.400$).

The urban/rural variable analysis identified a strong positive correlation between urban/rural area of working and sponsorship from the pharmaceutical industry for their training and continuing education ($t = 2.125$, $p = 0.038$). Pharmacists who are working in the urban area evaluate that they are more frequently sponsored for their continuing education from the part of pharmaceutical industry ($M = 2.3051$) than their colleagues from the rural area ($M = 1.2000$).

Correlational analysis

To evidence correlations between variables and years in the field, age and work experience it was used Spearman correlation test.

Negative strong correlations were obtained considering the practice to dispense the drug with the reference price and variable like work experience ($t = -0.318^{**}$, $p = 0.008$, age ($t = -0.344^{**}$, $p = 0.006$ and experience in the field ($t = -0.376^{**}$, $p = 0.002$), meaning that younger pharmacists with less

experience in the field are having the tendency to dispense more strictly the drug with the reference price.

The positive strong obtained correlation between work experience ($t = 0.457^{**}$, $p = 0.000$), age ($t = 0.382^{**}$, $p = 0.002$) and experience in the field ($t = 0.480^{**}$, $p = 0.000$), showed that the years of work and years spent in the pharmaceutical field are strongly influencing the behaviour of recommending OTC products and supplements, complementary to the treatment of the given pathology. This result is explained by several possible factors: on the one hand, experience in the field assures a better accommodation with the pathology and older pharmacists are more determined to offer medical advices. On the other hand, probably they have a longer relationship with the patients and they know better their pathology or patients are more willing to follow drug counselling from the part of older pharmacists than younger pharmacists.

Older pharmacists and more experienced ones are more frequently sponsored for their continuing education by the pharmaceutical companies, compared to younger pharmacists who usually sustain their professional education from personal resources.

This result could be explained by the fact that pharmacists with more experience are less interested in investing their personal money in training or pharmaceutical companies are more disposed to sponsor older pharmacists.

Other obtained data are presented in Table I.

Table I
Correlational study

Items	Work experience	Age	Experience in the field
<i>I only dispense the drug with the reference price</i>	-0.318^{**} 0.008	-0.344^{**} 0.006	-0.376^{**} 0.002
<i>I counsel the patient on alternatives in what concerns other brand names</i>	0.122 0.322	0.032 0.803	0.075 0.554
<i>My relationship with the pharmaceutical representative is an important criteria in dispensing a certain RX drug</i>	0.154 0.241	0.157 0.258	0.125 0.350
<i>My relationship with the doctor is an important criteria in dispensing a certain RX drug</i>	0.132 0.290	0.142 0.278	0.063 0.629
<i>By which means do you cover the cost of your continuing education and training: Pharmaceutical industry sponsorship</i>	-0.374^{**} 0.003	-0.445^{**} 0.001	-0.381^{**} 0.003
<i>By which means do you cover the cost of your continuing education and training: Sponsorship from the employing institution</i>	0.034 0.797	0.037 0.786	0.017 0.902
<i>By which means do you cover the cost of your continuing education and training: National and international projects/grants</i>	-0.109 0.399	-0.205 0.130	-0.065 0.626
<i>By which means do you cover the cost of your continuing education and training: My own resources</i>	0.157 0.214	0.131 0.327	0.145 0.269
<i>When counselling the patient, I take into account his financial contribution</i>	0.027 0.829	0.061 0.638	-0.023 0.858
<i>Drug dispensing is determined by disbursements from the National Health Insurance House</i>	0.117 0.343	0.222 0.083	0.074 0.564
<i>I recommend OTC products and supplements, complementary to the treatment of the given pathology</i>	0.457^{**} 0.000	0.382^{**} 0.002	0.480^{**} 0.000

^{**} $p < 0.01$

The study's results prove that pharmacists are interested in company's profitability, are respecting legislation and rules imposed by the National Health Insurance House, but are also adjusting their selling practices to patient's financial needs. Over 75% consider the patient's financial contribution when dispensing a drug. A total of 98.61% of the questioned pharmacists counsel patients on alternatives in what concerns brand names. 96.87% declare that their relationship with the healthcare representative is an important criterion in dispensing of a particular RX drug, while the relationship with the doctor is important for over 75% of the pharmacists. In what concerns continuing education and training, over 60% of those surveyed bear the expenses of their trainings. Pharmaceutical products are of great importance to people's health. Drugs represent a great percentage of the costs allocated to healthcare. Drug pricing and procurement policies are used to determine or to influence the price paid for medication [7].

In order to control costs, the use of generic drugs is encouraged in most countries. Various interventions are used to reduce patients' requests for medication, by either refusing or limiting product reimbursement and by providing an incentive for patients to cut down on drug consumption. These interventions include defining a list, either of reimbursable drugs (the positive list), or of non-reimbursable drugs (*the negative list*), and patients' co-payments, which force them to pay part of the cost of a prescribed product, or a fixed fee. Policies meant to affect doctors' prescription behaviour include guidelines, information (about price and less expensive alternatives) and feedback, as well as the use of budgetary restrictions.

Once Romania joined the EU, pharmaceutical companies aligned their internal regulations regarding promotional marketing to the imposed European guidelines, but this took place differently for original drug manufacturers, compared with generic drug manufacturers. Pilot projects and legislation were implemented in order to empower the doctors and pharmacists and to assure a good quality of medical services to patients [6, 13]. But ethical practices are not adopted by all stakeholders. Not all companies are affiliated to ARPIM (The Romanian Association of International Medicine Manufacturers), so that full compliance with ethical codes in the promotion of drugs is questionable.

Conflicts of interest may emerge at both ends of the relation: on the one hand, doctors or pharmacists can be manipulated, and on the other hand, companies must be profitable. Pharmaceutical representative are playing an important role, being sometimes seen as providing around 75% accuracy in their presented information about drugs. [8] Some American authors recommend *the balancing act*: medical service providers should act in the

patient's economic interest, they should intervene, in the patient's name, by reasonable measures, so that the patient will have access to health resources [9]. Other authors promote the policy of *disclosure*: the patient needs to be informed about the risks posed by budgetary limitations imposed by healthcare policies [5].

Medical jurisprudence encourages the doctor or pharmacist to act with a maximum of effort in the patient's interest, so that his loyalty might not be questioned. The work environment, technology, management and professional skills may contribute to variations in pharmacists' practices of intervention in the medical prescription, in and among community pharmacies [10]. In Norwegian community pharmacies, for instance, almost 2% of pharmacists intervene, and various studies point out that the connection between pharmacists and general practitioners (GPs) is a problem remarked on and complained of by both parties. This problem is highlighted in several specialized studies performed in various countries, and the blame falls on economic reasons, management, practitioners' attitudes and expectations being crucial to a good collaboration; thus, various strategies and interventions have been suggested in relation to the identified factors, so that a multidisciplinary collaboration may be attained [11].

Studies are showing that the information most often desired by patients from their pharmacist is explaining common side effects and potential drug interactions. Factors that facilitate the possibility to receive counselling were reported as privacy and/or a separate space or room available for counselling, the attentiveness, friendliness and the availability (time) of the pharmacist on duty. Factors like time and privacy seem to be important for patient-pharmacist relationship [13].

Conclusions

Drug dispensing by pharmacists is influenced by a series of factors, including the existence of healthcare policies, the legislation in place, and the relationship with the medical representative, personal opinions and profitability. Pharmacists must act in the patient's interest, trying to delineate themselves from the interest of their employing company.

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