The Attitudes and Practices of Albanian Pharmacists Regarding Complementary Medicinal Products and Supplements

Dr. Henrrik Prendushi
Department of Nursery/Physiotherapy, Faculty of Natural Sciences, University of Shkodra, "Luigj Gurakuqi", Albania.

Abstract: The use of Complementary Products (CP) from the wide community, the health benefits and risks, and the role of pharmacists in their correct use are been the object of our study. We also looked to understand the attitudes and practices of pharmacists regarding the needs of patients for qualitative information and the use of CP. An anonymous questionnaire was administered to the pharmacists of Tirana during two days of a topic of Continuing Education in March 2016. The questionnaire was made of 40 questions. It was completed by 108 pharmacists, about 70% graduated in the public university and 30% in private universities. The number of respondents makes up at about 10% of the total number of pharmacists for Tirana. The study is part of a wider and more complex future study about the CP and their use in the practice of pharmacy. The first results of this study give us an interesting frame about colleagues of Tirana. It is clearly evidenced a very good situation regarding the knowledge of foreign languages, 93.3% declare that they know English. 55.4% are trained for this group of products and 43.3% have a training certificate. 91.4% declare that these products constitute a future training target, and up to 78.0% would specialize. The main sources of their acquired knowledge are the manufacturers for 39.0%, and the Continuous Education topics organized from the Order of Pharmacists for 26.0%. Regarding the organization of the future trainings 63.7% prefer the Order of Pharmacists, 22.6% independent experts and 13.7% the public university. No preference for private universities. Pharmacists choose two main ways for their training: seminars for 49.0% and short courses online for 31.4%. For the 52.7% of the pharmacists the preferred source of information is the Internet, while 75.0% of respondents declare as the most qualified source of scientific information. For 92.6% of them it is necessary that the students of the Faculty of Pharmacy ought to study more about the argument. Reporting of adverse effects is practically inexistente, only one report stated. Assessment of the quality of products makes in the first place the products originating from the EU, then those from other countries and in the end the proper products. Control of these products for over 80% of respondents is considered inadequate.

Keywords: complementary products, herbal products, supplements, pharmacists attitudes, adverse effects.

1. Introduction

Herbal products and supplements of various types generally known under the label of Complementary Medicines (CP), are being used more and more in Albania [1], as in many other countries of the world [2]. In EU countries the use of such products ranges from 0.3 to 86.0% [3], but in a study made in 2014 at the University of Tirana about the curricula of the Faculty of Pharmacy it is not discussed the need to increase the knowledge about these products [4]. Reasons for this popularity are numerous and belong on the countries and cultures. They start from the traditions and the economics, more characteristic for developing countries and groupings of emigrants [5-6] in the territories of developed countries, to those related to the awareness about the adverse effects of conventional drugs and the hope that this group of products will help to treat the disease with less consequences, for developed countries [7-12]. However, they are characterized, generally, by the characteristic of self-medication [13-15].

In the most countries there are the pharmacies commercializing these products and the patients expect that the pharmacists are well informed about them [16]. Despite legislative differences in all the countries [17], pharmacists are the health care professionals more in contact and easily contactable by the patients. They constantly, along with dispensing of medicines, provide information about them [18]. Pharmacists in their daily activity help patients to determine if self-medication is appropriate or if they should address a health professional. Generally, in the category of complementary medicinal products, the pharmacists should improve
their knowledge especially about the safety of these products and their advice should be much more reliable and evidence based information [19].

From many surveys results that patients want that the pharmacists have good knowledge about this category of products and to be able to inform them [20]. Pharmacists themselves define their knowledge about this category of products as insufficient [21]. In some studies in developed countries it has been identified that pharmacists seeks to expand their knowledge under the pressure from their patients that are increasingly interested and well informed [22].

The goal of our study was to understand the attitudes of pharmacists to this group of products. In our study we also tried to find differences between some groups of pharmacists. The first were the trained/untrained pharmacists and then the different categories as pharmacy owner, technical director, and pharmacist. We also analyzed the factors that motivate or reserve them to recommend these products.

2. Method

An anonymous questionnaire was distributed to the pharmacists present during two days, 23 and 25 March 2016, of the presentation of a topic of Continuing Education at the National Center of Telemedicine of Tirana. The subject had nothing to do with the issues addressed in the questionnaire and therefore does not influence the expression of opinions by the respondents. During two days 125 questionnaires were distributed, of which 108 were returned compiled and 6 white, having a compilation percentage of 86.4% (108/125). The number of respondents is about 10% of the total number of pharmacists of Tirana.

The questionnaire consists of 40 questions, some of which even with the possibility of multiple answers. The questionnaire was based on and adapted from previous works [21, 23-24]. In designing the questionnaire we started from the idea of what we like to know from pharmacists and it consists of 1) demographic data, 2) training and sources of information, 3) attitudes of pharmacists regarding these products, 4) quality of products, and 5) safety of products.

3. Data Collection and Analysis

Processing of questionnaires commence with their numbering. For data analyzing it is been used Excel software. There was build up a table in Excel where in each column were placed the questions and the response options while each row corresponds to a compiled questionnaire. In some cases in the questionnaires there are unanswered questions, this is reflected, in the table in Excel, as "ABSENT". To better analyze the data, in Excel table, we set a filter system for each column. In data analyzing we calculated percentages of those who de facto answered the questions. We tried, for some percentages, a statistical evaluation of the continuity between the responses using the Chi squared (Yates' correction), but in no case were found statistical differences between the groups of respondents.

4. Results

4.1. Demographic Data

The questionnaire was compiled by 96 (88.9%) women and 12 (11.1%) male of different ages, but predominantly young. All the respondents were pharmacists to private pharmacies of Tirana and its suburbs. About the year of graduating there are pronounced 107 pharmacists. Of these, graduated up to 1990 (the 90’ are the years of political changes in Albania) there are 17 (15.9%) and from 1991 to today there are 90 (84.1%). 70.4% are graduated in public university, 28.7% in private universities and 0.9% abroad (in Italy). Regarding the position that they occupy in pharmacies, there are 20.4% pharmacy owners, 33.3% technical directors and 46.3% pharmacists. A special aspect of Tirana pharmacists results the knowledge of foreign languages. 104 pharmacists declare to understand at least one foreign language, 97 (93.3%) English language, 4 are not pronounced. With only one foreign language there are just 18, with two languages 52 pharmacists (generally English and Italian), with three languages 23 pharmacists, and with more than 3 languages there are 8 pharmacists.

4.2. Training and Sources of Information

55.4% of pharmacists declared to have training about these products and 43.3% to possess a training certificate. Seminars are the favorite way of training for 49.0%, and short courses online for 31.4% of them. The majority of respondents, 81.1%, would dedicate to the study for this group of products from 1 to more than 2 hours per month. 63.7% of respondents prefer that the training ought to be organized by the Order of Pharmacists, 22.6% by independent experts and 13.7% from the public university. For 91.4% of respondents this group of products is a training target for the future. Only 38.4% would hire a specialized person in their pharmacies, but 78.0% would specialize.

92.6% of pharmacists support the idea that the students of the pharmacy should study more about these products.

Regarding the sources of their acquired knowledge, in a question with multiple response options, 38.8% reported that their knowledge it is been acquired from the manufacturer, 26.1% from the topics of Continuing Education organized by the...
Order of Pharmacists, 14.2% in special courses, and 22.4% from other sources. 18.3% of pharmacists determine as the primary source of information the professional books, specialized books for these products for 29.0%, and for 52.7% the Internet. For 75.0% of pharmacists the scientific information occupies the first place in terms of quality.

4.3. Attitudes of Pharmacists Regarding These Products

96.3% of pharmacists commercialize these products. For 97.1% of respondents the demand for these products is increased in the last 5 years. 96.3% of the pharmacists trust on these products by using them in their families. 96.2% suggest the products to their patients. 85.7% recommend these products for the treatment of health problems as well as conventional drugs. For 51.5% of the pharmacists the leading factor for recommending these products, however, it is the belief that such products are less harmful than conventional drugs, and for 35.0% of them because of their knowledge about specific products.

For 25.8% of the respondents the main reasons for reserving them to recommend this group of products it is the insufficient information as well as for the other 25.8% the insufficient time. For 24.7% it is the poor quality of these products.

When asked about three specific categories results that 99.0% of the pharmacists recommend vitamin and mineral supplements as well as the products rich / enriched with omega 3, and 89.8% recommend prebiotics / probiotics.

For 81.5% of the pharmacists medical prescribing it is not necessary for these products. This is also reflected in the fact that 76.7% of pharmacists do not ask for a prescription. But 88.8% of respondents receive prescriptions from doctors. For 93.1% of respondents it is the duty of the pharmacists to advise patients about these products. However, it turns out that for 55.6% of the cases there is the pharmacist recommending these products, and for 38.4% the physician, but just in 6.0% of cases there are the patients deciding.

37.5% of the pharmacists respond positively about their knowledge for these products, while 96.1% of them say that patients ask for more information than 5 years ago.

4.4. Quality of Products

The control of this group of products for just 19.6% it is organized properly.

In a likert with 5 values about the quality, by the country of origin, of products, 88.0% of respondents rate the quality of proper (Albanian) products with a mean value of 2.62, the quality of products derived from EU, 76.8% of the respondents, with a mean value of 4.20, while the quality of the products from the other countries, 72.2% of respondents, with a mean value of 3.27.

4.5. Safety of Products

From the answers of the pharmacists result that in 14 cases (13.3%) they encountered adverse effects. In all cases, the pharmacist advised the patient, in two cases, they informed the manufacturer and only in one case reported to the authorities. 100% of pharmacists state that they should give more information to the patients about safety and interaction of these products with medicines.

5. Discussion

5.1. Training and Information

It is the first time, as we know, that it is made a study regarding this category of products in Albania.

In our study we found that the pharmacists are concerned about gaining knowledge and training regarding this group of products. The results show that 43.3% of respondents are trained for this group of products, similarly as in other studies [21, 25]. Respondents stated that their acquired knowledge mainly comes from manufacturers of these products, for 38.8%, and from the topics organized from the Order of Pharmacists for Continuous Education, for 26.1%. When selecting training sources, certainly in light of the experience mentioned above, 63.7% of the pharmacists have no doubt and set as their preferred source the Continuing Education [26] topics organized by the Order of Pharmacists. In a study [27] it is been found that the pharmacists with previous Continuing Education training classified better, in tests regarding this products, than those without it. This clearly evidences the positive role of the Continuous Education in Albania as well as in other countries.

The personal objectives regarding the future of our professionals are very clear. For 91.4% of them these products constitute a training target, similarly as it is been found in other studies [28]. It is a very important consideration and appreciation resulting from our study that the 78.0% of the pharmacists would desire to specialize in these products, but only 38.4% will hire a specialized pharmacist for these products. We think that this is related to the level of actual economic interest. In their pronouncing about the various forms of training in the first place with about the half (49.0%) of the preferences are the seminars, a little old fashion, but for about one third (31.4%) there are the short courses online, the new tendency. It is interesting the fact that the online courses are still an unexplored way of training for our pharmacists.
A very remarkable result is that the 92.6% of the respondents state that the pharmacy students should study more about these products as well as it results from different other studies [29-31]. In addition, in some studies it is shown that the students of health faculties clearly evidenced their aspiration to study about these products [32-33].

The list of pharmacists of the main sources of information begins with Internet for 52.7%, and specialized books for 29.0%. We think that the selection of the Internet, as the main source of information, is mostly due to the reference speed and of the limited time available. The lack of time, anyway, is among the most important factors, for 25.8% of respondents, when asked about the reasons that reserve the pharmacists to recommend these products. Using the Internet as an important source of information is found in an Australian study [34], too. However, the qualitative aspect of the information is clearly dominated, 75.0% of respondents, from the scientific literature, that is clearly traced online better than anywhere. This declaration it is very significant as it express the right professional direction to stay updated, qualitatively, with the most important source of information.

5.2. Attitudes of Pharmacists

The pharmacists top the list of health care professionals in relation of the daily advice and recommendations to patients for the selection and use of drugs of any kind or class.

To assess their attitudes regarding these products we asked them a number of questions. First, we asked if they use these products in their families. Here they are expressed almost unanimously giving positive answers up to 96.3%. Another important question was to understand the position of pharmacists about recommending or suggesting of these products to their customers. The result was very clear, the 85.7% recommend these products for the treatment of health problems as well as the conventional drugs, and 96.2% suggest these products to the patients. These data are supported by the fact that 96.3% of them commercialize these products in their pharmacies. In confirmation of this tendency they say, 97.1%, that the demand for this group of products is increased in the last five years. Similar data also results from a number of studies [21, 32, 35-36]. Their interest is expressed without a doubt when asked about some product categories. 99.0% of them recommend vitaminic and mineral supplements as well as the products rich / enriched with omega 3, and 89.8% recommend prebiotics / probiotics [6, 37].

Looking to be more specific we have raised the question of why they recommend these products. In the first place, with 51.5%, ranks the trust they have that these products are less harmful than drugs, likewise as in [35], while for 35.0% because of the knowledge they have about specific products.

Pharmacists (25.8%) when state about their attitude to recommend this products group affirm that the main barrier is the insufficient information and for another 25.8% the insufficient time [38-39]. Lack of information about these products, as barrier, it is marked when we look at the responses of the pharmacists regarding the level of knowledge about these products in Albania. It turns out that only 37.5% reply positively (to have enough information) to this question. This data became more pressing if it is considered the fact that for 96.1% of respondents the customers want more information than five years ago. Furthermore, it is significant the fact that the pharmacists (93.1%) recognize as their obligation to advise, elucidate and help the patients for the safe and the right use of these products [16, 18, 40].

An important aspect of working with this group of products is how pharmacists perceive the need for prescriptions. For the 81.5% of the responders the prescriptions are not necessary. The above result is also reflected in the fact that 76.7% of pharmacists do not require prescriptions to their patients. This phenomenon is also encountered by other researchers in different countries [41, 52]. However, 88.8% of respondents receive prescriptions from doctors for these products [42]. It results that in 55.6% of the cases it is the pharmacist who recommends these products, for 38.4% it is a doctor and only for the 6.0% there are the patients choosing by themselves. We consider this as a good situation because there are, for 94.0%, the health professionals governing the use of these products.

5.3. Quality and Safety of Products

When we talk about these products quality we cannot forget their control system. As it turns out, from the answers, less than one fifth (19.6%) of the respondents agreed that it is well organized. An even more clear demonstration of this comes from the likert, with 5 values, where the assessment shows that the quality of the Albanian products it is estimated with a mean value of 2.62 points, from the 72.2% of respondents. For EU countries this value it is 3.27, from the 72.2% of respondents. We believe that the difference in the number of respondents express the different origin of the products commercialized in their pharmacies and, therefore, is an indication of the accuracy of the responses. In this context 100% of pharmacists affirm that they should inform more their patients/customers about conventional drug safety and the interaction with the products of this group [43].

In our study we found that just in 14 cases (13.3%) the pharmacists have encountered adverse
effects for this group of products. In all the cases, the pharmacist counseled the patient, in two cases informed the manufacturer and just in one case reported to the authorities. The very low number of reported adverse effects reflects the gaps about pharmacovigilance [44] as well as the concept that “however it is natural and does not harm” that we found in our survey, common as well as in other countries [45]. This situation, certainly, poses a significant problem.

In a Canadian study it is found that 45% of patients under treatment use at the same time similar products resulting in 7.4% adverse effects [46]. In another study [21] 25% of the pharmacists encountered adverse effects, but just 3% reported to the competent authorities. Harmful interactions are important especially in cases of life-threatening diseases [47-48]. The data from literature speak about the use of these products in contemporary with conventional drugs and without the knowledge of the doctor or pharmacists, so, resulting in adverse effects [49-51].

5.4. Differences Between Groups of Pharmacists

We have divided the respondents in different groups based on their attitudes in recommending or not these products. The groupings are build up relying in differences in the knowledge about these products, trained/untrained, and by the position of the pharmacist at the pharmacy, pharmacy owner/technical director/pharmacist. These grouping were compared and analyzed about the push/pull factors in recommending the products. We have tried to detect statistical significant differences between the percentages of the answers from the different groups of pharmacists but without positive results. The resulting lack of statistical significance between groups may express the unity of thought and evaluation for all pharmacists about these products, regardless of position and training.

6. Conclusions

Surveyed pharmacists present a very positive situation concerning the knowledge of foreign languages which in itself constitutes a sound basis not only for communication with foreign customers or patients but primarily for the use of professional literature.

The greater part of them expresses their interest for further training as well as the absolute majority would specialize about the products of this group. It is very important the fact that the pharmacists recognize as their main source of quality information the scientific literature.

It is significant the fact that their professional organization, the Order of Pharmacists, is known as an authoritative actor for the training, past and future, for this group products and selected by a qualified majority as the most reliable source for the organization of training activities.

Regarding the future colleagues, almost unanimously, pharmacists are expressed that the students of the Faculty of Pharmacy should study more about the products of this group.

The greater part of respondents confides in these products, and that is clearly expressed by using them in their families.

The data, from the questionnaires, show that the commercialization of this group of products, regarding the last 5 years, is in a growing trend as well as the patients are looking for more information. In this context pharmacists, without any doubt, declare that it is their professional obligation not only to inform/ counsel the patients about the use of these products but also for their quality and safety.

It is very positive the fact that the recommendation for the use of these products comes mostly from health professionals, doctors and pharmacists, and patients rarely decide by them.

Even the pharmacists of Tirana do not escape from the myth that products of this group, being generally natural, are less harmful than conventional drugs.

Level of adverse effects encountered is extremely low and can be said that their reporting to the competent authorities is inexistent.

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8. References


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