

Phytotherapeutic Compounds

The Consumer-Pharmacist Relationship

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Abstract

Pharmacists play an important role in providing information about natural products and in preventing risks related to these substances, particularly with respect to interactions with conventional drugs. For these reasons, a survey was specifically designed to investigate the quality of self-care counselling by pharmacists on phytotherapy.

Twenty-three pharmacy stores took part in the project. Face-to-face interviews, using a pre-structured questionnaire, were undertaken by trained pharmacists to consumers buying a herbal product. The questionnaire included socio-demographic data and 17 items designed to elicit information regarding the reason of consumption, product knowledge, relationship/communication with healthcare providers, level of satisfaction, concurrent drug use and adverse reactions. The collection of interviews started in November 2006 until April 2007.

From the analysis of 1420 questionnaires, it is evident that herbal use is increasing in Italy: 12% of our interviewees were buying a herbal product for the first time. The present survey highlights the favourable perception of efficacy of phytotherapeutic compounds by the pharmacy's consumers, who consider this healthcare modality to be an important and effective way to promote health/wellness and disease management as well as being safer overall than conventional drugs. Moreover, findings from this study demonstrate that pharmacists are more likely to answer correctly about the uses of herbal medicines than about drug interactions, adverse drug effects and cautions about these products.

Natural products can be taken as self-medication without advice from a pharmacist or a physician; being so freely available, the use of these products is often perceived as safe by consumers.^[1] The lack of a professional supervision may expose consumers to the risk of adverse effects, including those caused by drug interactions.

It has been suggested that pharmacists might be useful in helping patients to make safe and informed choices about phytotherapeutic compounds. Consum-

ers themselves consider pharmacists trustworthy and knowledgeable about herbs. In one US study, 37% of respondents agreed that pharmacist advice is important for alternative therapies, and 30% relied on pharmacists for herbal personal use.^[2]

Since pharmacists are readily accessible to consumers when they are buying herbal products, they are in a good position to provide evidence-based information about these products, particularly with regard to potential interactions with drugs. Pharma-

cists may have a professional role as expert advisers on herbal products and dietary supplements; therefore, the American and Canadian professional associations have recommended that the profession of pharmacists should be actively interested in herbal products and dietary supplements as part of their practice. However, in spite of these recommendations and the increased request for herbal products, better teaching on this topic by schools of pharmacy has not been observed.^[3]

This study was intended to evaluate the knowledge and attitudes of consumers and pharmacists and the consumer-pharmacist relationship about phytotherapeutic compounds.

1. Data Collection

Data were collected over a 6-month period (November 2006 to April 2007) in 23 pharmacies selected in urban and rural areas of Verona, a northern town in the Veneto region in Italy. Informed consent to be involved in the study was required from the pharmacists. Consumers also had to give their consent to be interviewed. The study protocol was approved by the Pharmacists' Association of Verona.

In every pharmacy, a pharmacist trained as an interviewer approached all consumers who wanted to buy phytotherapeutic compounds, informed them of the aim of the study and asked if they agreed to participate. Only consumers <18 years were excluded from the study.

The study was descriptive, using a *de novo* pilot-tested pre-structured questionnaire. It also contained socio-demographic information and was based on 17 items related to phytotherapeutic compounds (type of herb taken and for what symptom/disease), quality of relationship/communication with the pharmacist, level of satisfaction, concurrent drug and the adverse reactions eventually observed.

2. Data Analysis

Data were analysed using an Access database. Statistical analysis was performed using SPSS software (SPSS Inc., Chicago, IL, USA).

3. Results

The number of completed interviews was 1420. Ten consumers refused to participate. The interviews were collected in pharmacies located in an urban area in 79% of cases. Interviewees were more likely to be 41–50 years of age (38.5%), female (65.8%), with a primary-secondary level of education (63.1%). Nine percent of the interviewees were buying herbal products for their relatives.

To the question "How often do you buy herbal products?", 12% of the interviewees answered "it is the first time". Twenty-four percent of females used a herbal product during pregnancy and 58% did not inform the physician about their choice. The main reason for the use of herbal products was the conviction that they are safer than conventional drugs (30.2%). In the majority of cases, advice was given by the pharmacist (67%), but in 25% of cases the use of herbal products was based on personal opinion, advice from friends or as a result of mass-media advertising. Many consumers considered that the information they received on herbal products was fairly good (45.1%); however, 65% were doubtful about effective control of the efficacy and safety of herbal products. In spite of their high cost, 97.3% of consumers were willing to continue to buy and use herbal products. The herbal products bought by consumers interviewed in this study were mainly bought to treat gastrointestinal and respiratory problems, hypertension, hypercholesterolaemia, urinary tract and sleep disturbances and anxiety. Other indications for use related to weight reduction, correction of menopausal disturbances, activation of the peripheral circulation and strengthening of the immune system.

Table I shows that in 11.33% of cases, pharmacists suggested a herb to patients who were already taking a conventional drug that could potentially interact with the herb, such as antihypertensives, HMG-CoA reductase inhibitors ('statins'), aspirin (acetylsalicylic acid), paracetamol (acetaminophen) and contraceptives.

Table 1. Herbs advised by pharmacists to 161 consumers (11.33%) taking conventional drugs that could potentially interact

No. of consumers	Herb	Drug
80	Garlic, guggul	HMG-CoA reductase inhibitors ('statins')
40	Garlic	Antihypertensives
13	Echinacea	Aspirin (acetylsalicylic acid)
11	Echinacea	Paracetamol (acetaminophen)
10	Glucomannan, altea, Psillium, inulin	Contraceptives
7	Licorice, ginseng, guarana	Antihypertensives

4. Discussion

As shown by other authors,^[4] the use of herbal products is increasing. We observed the same trend in Italy: 12% of our interviewees were purchasing a phytotherapeutic compound for the first time.

Our findings confirm the favourable perception of efficacy of herbal products by the pharmacy's consumers. They believe that this healthcare approach is an important and effective way to promote health/wellness and disease management as well as being safer than conventional drugs. This belief is reinforced in special populations, such as pregnant women.^[5] However, doubts about the quality of scientific information on herbal products are reported by consumers in our study. This could derive from the fact that in Italy, as in other countries, there is a perceived lack of government oversight/regulation for herbal products. Since scientific data on efficacy and safety of these products are not required, there is no need for manufacturers to prove that their products are effective and safe.^[6] The pharmacy may be the appropriate place for providing consumers with information, and pharmacists, as health-care providers, are in an important position to advise patients wishing to self-medicate with herbal products.

From our survey, it is evident that pharmacists are more likely to answer questions correctly on the use of herbal products than on herb-drug interactions, adverse effects and precautions since in some cases they suggest a herbal product that could poten-

tially interact with concomitant drugs.^[7-9] This observation is in accordance with the study by Kemper et al.,^[10] in which the majority of pharmacists knew the most common clinical uses of echinacea and St John's wort and felt confident about herbs and dietary supplements.

Correct communication from pharmacists could lead to additional benefits (better management of risks, achievement of desired healthcare outcomes) and to increased levels of satisfaction for consumers. In our survey, the majority of subjects had a low level of education: this kind of consumer is more willing to receive information, whereas in our study only about half of the sample population considered this aspect of communication fairly good. Instead, consumers of herbal products expect to interact with pharmacists when picking up their request, as also emerged in a previous study,^[11] where 92% of subjects indicated that having a pharmacist available for personal consultation was important. In a study by Zeilmann et al.^[12] over half (52%) of the patients purchased their herbal products in drugstores or grocery stores where pharmacists are available, but none of them received any herb information from the pharmacist.

Since an important cue to improve pharmacist-consumer communication is to answer consumers' questions, it is imperative to find ways to increase questioning by consumers who are often reluctant to ask for information from their pharmacist. Moreover, there is an urgent need to educate health-care professionals, especially pharmacists, in the attempt to improve the collaborative pharmacist-consumer relationship.

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