

Attitudes and Practices of Pharmacists Regarding the Use of Herbal Products

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Abstract

World Health Organization (WHO) reported that traditional products continue to be widely used in most countries. The aim of this study is to evaluate the pharmacists' attitudes and practices toward herbal products' uses.

This study was a cross-sectional descriptive study conducted in Istanbul (Turkey). Sociodemographic characteristics of the participants were recorded and a self-structured questionnaire was applied face to face.

A total of 50 pharmacists were included in the study. The mean age was 34.6 years and 39% of them have been in service for less than 20 years. Ninety percent of the pharmacists stated that they sell herbal products and believe that the herbal products were not completely harmless. More than half of the pharmacists (68%) stated that they were not questioning the herbal product use while taking the anamnesis from patients, while 54% of the pharmacists were mentioning about the side effects of the herbal products. According to the results, a majority of pharmacists sell herbal products and counsel about herbal products. Since pharmacists are easily accessible health consultants, they interact with patients through patient education and drug counseling and will contribute to the rational use of these products.

INTRODUCTION

Herbal products are intended to be used for medicinal and therapeutic purposes through patients. In various studies, it is stated that about half of the participants use at least one herbal product (Mosihuzzaman, 2012; Kissal *et al.*, 2017; Bhat *et al.*, 2019; Chopra and Dhingra, 2021). It has been well observed that patients have had a strong belief in the healing power of natural herbs since ancient times (WHO, 2020). Additionally, in various studies, it has been shown that participants often receive information about the use of herbal products from their relatives (Djuv *et al.*, 2013; Peltzer *et al.*, 2019).

Pharmacists have critical roles in the prevention of adverse effects of short- and long-term use of herbal products via patient education, counseling, and monitoring. The perspectives of patients and pharmacists regarding the use of herbal products can be different. According to Gelayee *et al.* (2017), most pharmacists think using herbal products has beneficial effects. In the same study, most of pharmacists reported that there is a significant interaction between drugs and herbal products. In another study the most pharmacists stated that they dispense herbal products in their pharmacies, and 36% of pharmacists are "always" counseling patients about the use of herbal drugs (Alsayari *et al.*, 2018). According to

Shraim *et al.* (2017), pharmacists' recommendations on the use of herbal products are the following areas; herbal drug use in pregnancy and children, herb-drug interactions, side effects, and evidence-based effectiveness of herbal drugs.

Although there are many studies on the attitudes of patients and pharmacists on the use of herbal products, there are no studies that evaluated both groups together. Therefore, the aim of this study is to evaluate the attitudes and practices of the patients and pharmacists regarding the use of herbal products.

MATERIALS and METHODS

This cross-sectional descriptive study was conducted on 50 community pharmacists in Istanbul (Turkey) between December 2017 and February 2018. The ethical approval was taken from a local ethic committee (Protocol code: 09.2017.644). All respondents were asked for their consent before participation in the study. All data were collected by the authors *vis a vis*.

The pharmacists' sociodemographic characteristics (*age; gender; work experience; attending an additional training on herbal products, and herbal drug use*) were recorded. A structured questionnaire was adapted from previous studies (Gelayee *et al.*, 2017; Alsayari *et al.*, 2018; Shraim *et al.*, 2017). The questionnaire consists total 7 questions for evaluating the pharmacist's attitudes and practices of the use of herbal products (*selling herbal products; recommendations of the use of any herbal products; belief that using herbal products is harmless; questioning the herbal product use while taking the anamnesis from patients; the primary source of information about herbal products; topics mentioned by pharmacists when they recommend the use of herbal products to the patients and diseases that the pharmacists are counseling patients on herbal product use*).

Statistical Analysis

Statistical Package for Social Sciences (SPSS) version 15.0 for windows (SPSS Inc., Chicago, IL) was used for the analysis of data. Descriptive statistics (frequencies, percentages, and means), Pearson's Chi-square test of independence and Fisher's exact test were used to assess correlations between

sociodemographic factors and items of the questionnaire. $P < 0.05$ was considered significant.

RESULTS and DISCUSSION

It was found that 53% of pharmacists were female, and 39% of them have been in service for less than 20 years. Forty-seven percent of the pharmacist stated that they used herbal products. The other characteristics of pharmacists were given in Table 1.

Ninety percent of the pharmacists stated that they sell herbal products and believe the herbal products are not completely harmless. More than half of the pharmacists (68%) stated that they were not questioning of the herbal product use while taking the anamnesis from patients. Also, half of the pharmacists stated that their main information sources for herbal products were brochures, prescriptions, and the internet. The other practices towards using herbal products are given in Table 2.

The pharmacists were asked about the topics mentioned when they recommend the use of herbal products to patients. More than half of them (58%) stated that they mentioned the quality of the ingredients of herbal products (Figure 1).

Additionally, the pharmacists were asked for which diseases (ATC classification) that they were counseling patients on herbal products. One hundred and ninety-nine answers were evaluated, and the most common diseases were found as digestive system diseases (13%), endocrine, nutrition, and metabolic diseases (12%), and respiratory system diseases (11%) (Figure 2).

According to the report of the World Health Organization (WHO), the use of herbal products continues to be widely used in most countries, and a majority of the public use herbal products as primary health care treatment (WHO, 2020). This study evaluated the attitudes and practices of both of them towards the use of herbal products.

In this study, it was determined that 90% of pharmacists stated that herbal products were harmful. This result is consistent with a current study (Carr and Santenello, 2019). In the same study, it was reported that the majority of pharmacists were selling herbal products, a similar result to this study.

Table 1. Characteristics of pharmacists.

Characteristics	n	%
Gender		
Female	27	53
Male	23	47
Age		
<40 years	14	28
41-50 years	19	39
>50years	17	33
Educational status		
Bachelor of Science	43	86
Master degree	6	12
Doctor of Philosophy (PhD)	1	2.0
Work experience in community pharmacy		
<20 years	20	39
20-30 years	17	35
>30 years	13	26
Attending an additional training on herbal medicines		
No	16	33
Yes	34	67
Herbal drug use		
No	53	53
Yes	46	47

n: number of pharmacists

Table 2. Attitudes and practices of pharmacists towards the use of herbal products.

	n	%
Selling herbal products		
No	4	10
Yes	46	90
Recommendation of using herbal products to the patients		
No	10	20
Yes	40	80
Believing that the use of herbal products is completely harmless		
No	45	90
Yes	5	10
Questioning of the herbal product use while taking the anamnesis from patients		
No	34	67
Yes	16	33
The main source of information about herbal products*		
Books	23	44
Prescriptions	26	50
Brochures	28	54
Internet	28	54
Drug Databases	20	38
Others	5	10

*n: number of pharmacists; *pharmacist marked multiple choices*

In this study approximately seventy percent of pharmacists stated additional training on using herbal products. This ratio was found to be higher than in other studies (10-20%)

(Gelayee *et al.*, 2017; Carr and Santenello, 2019).

In the study, only 33% of pharmacists stated that they questioned the use of herbal products while taking anamnesis. In two recent

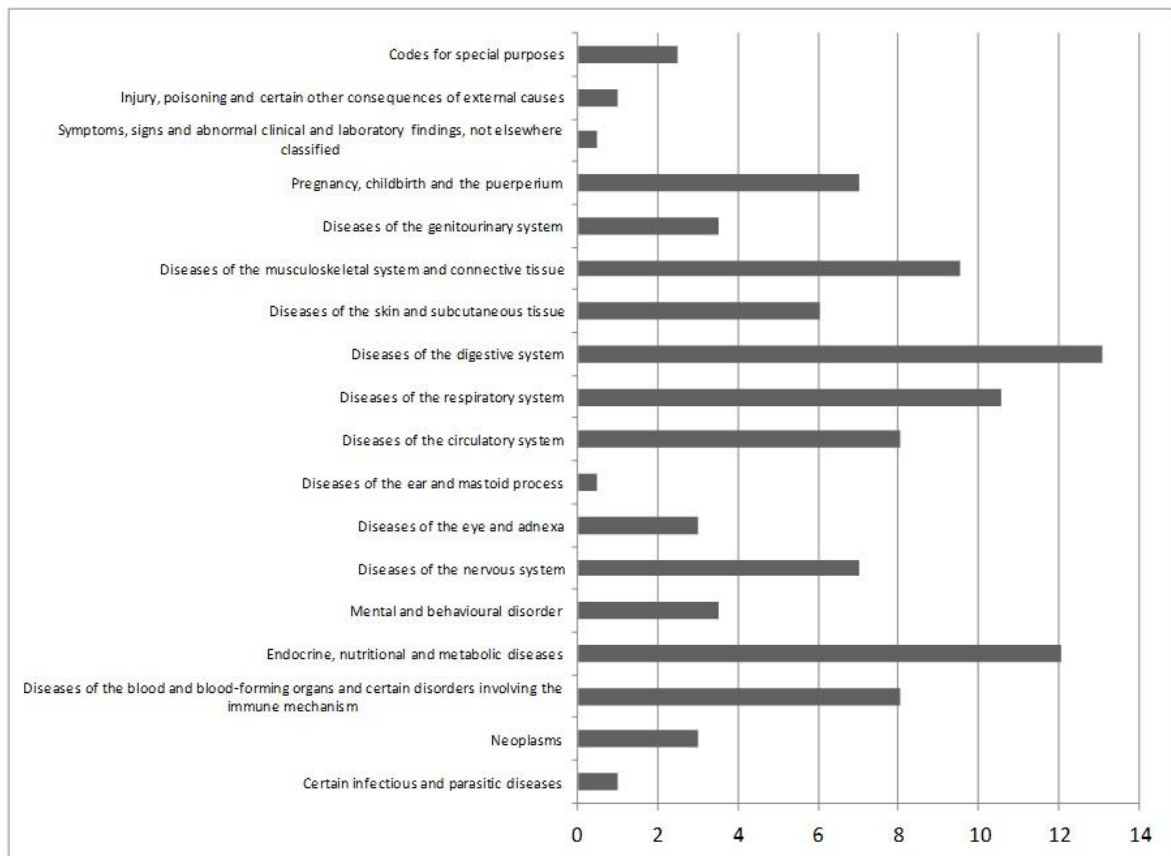


Figure 1. Topics mentioned by pharmacists when they recommend the use of herbal products to the patients.

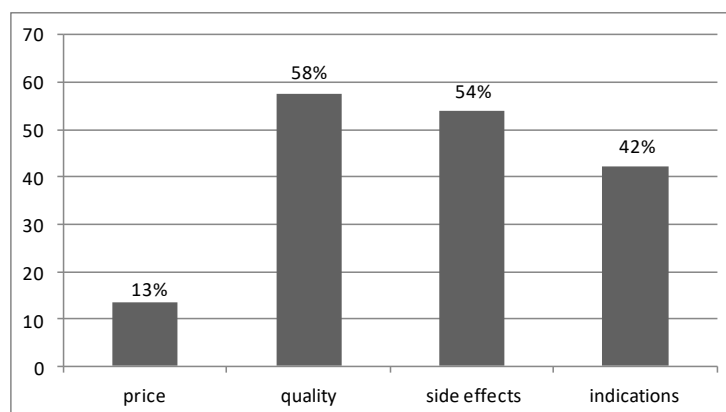


Figure 2. The percentage of diseases that the pharmacists counseling patients on herbal product use.

studies, it was found that approximately 50% of pharmacists reported asking patients about herbal medicine use (Peltzer and Pengpid, 2019; Carr and Santenello, 2019).

In this study, 54% of pharmacists reported that they always primarily mentioned the side effects of herbal products while counseling the public. This ratio was found to be higher in a recent study (25%) (Carr and Santenello, 2019).

Information sources about the use of herbal products have been reported as prescriptions, brochures, and internet by half of the pharmacists in this study, while other studies reported lower than 30% (Abahussain *et al.*, 2007).

In many studies, it was reported that pharmacists' mostly prepared herbal products for general health tonic and cough preparation

(Alsayari *et al.*, 2018; Alkharfy, 2010; Duraz and Khan, 2011). In this study the most frequent conditions associated with questioning for using herbal products to the pharmacists were found to be digestive system diseases (13%).

CONCLUSION

In this study, the attitudes and knowledge towards using herbal products of pharmacists were evaluated. It has been determined that most pharmacists sell herbal products. This is important due to pharmacists are easily accessible health consultants, they interact with patients through patient education and drug counseling, and they can contribute positively to the rational use of these products. Another significant result is that patients prefer herbal products, especially in several diseases, which emphasizes the importance of pharmacists in the rational use of medicines and herbal products. Evaluation of the attitudes and practices of the patients and community pharmacists will contribute to the rational use of these products.

ADDITIONAL INFORMATION

This research was presented at the 1st International Symposium of Biodiversity Studies and was published in the abstract e-book in the proceedings of the Symposium.

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