

## COUNSELLING OF PHARMACISTS TO COMMUNITY ON ISSUES OTHER THAN DRUG PURCHASING AND DRUG RELATED INFORMATION: A SURVEY IN ANKARA

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### Abstract

*In this study it is aimed to get clues on whether people make visits to the pharmacy other than drug purchasing and drug related information. Besides we wanted to find out on which issues people counsel to the retail pharmacists; whether the pharmacists can be helpful on every issue that people counsel; when they can not be helpful to the customer/patient which way they follow. A total of 231 retail pharmacists participated in the survey. A uniform questionnaire was distributed to the pharmacists. Data were collected during March-April 2003 and evaluated by SPSS (ver. 10)<sup>®</sup>. This study is a cross-sectional study. Of the 231 pharmacists 96.1% stated that people counsel on various issues other than drugs. Ailments in minor diseases, comments on laboratory tests, physician referral, diagnosing a disease, blood glucose level and hypertension measurement and having injections were the most frequently counselled issues. In most cases it can be concluded that pharmacists follow an ethical way by referring the patient/relative of the patient to the right health institution or professional when he cannot be helpful on the counselled issue.*

**Key Words:** Community/Retail Pharmacy, Pharmacist(s), Counselling, Referral.

### Eczane Eczacılarına İlaç Alma ve İlacı İlişkin Konular Dışında Danışılanlar: Ankara'da Bir Çalışma

*Bu çalışmada kişilerin eczaneye ilaca ilişkin bilgi ve ilaç satın alma dışında, danışma hizmeti almaya gidip gitmedikleri hakkında ipuçları edinilmesi amaçlanmıştır. Ayrıca hangi konuları eczacıya danıştıklarını, eczacıların kişilere yardımcı olamadığında nasıl bir yol izlediklerini ortaya koymak amaçlanmıştır. Araştırmaya toplam 231 serbest eczacı katılmıştır. Eczacılara tek tip soru kağıdı dağıtılmıştır. Veriler Mart-Nisan 2003'te toplanmış, SPSS (ver. 10)<sup>®</sup> ile değerlendirilmiştir. Bu kesitsel bir araştırmadır. 231 eczacının % 96.1'i kendilerine kişilerin ilaç dışındaki çeşitli konularda danıştıklarını bildirmiştir. En çok danışılan konu ve istenen hizmetler; ufak hastalıklara çareler, laboratuvar testlerinin yorumu, doktora yönlendirme, hastalık teşhisi, kan glukoz düzeyinin ve kan basıncının ölçümü ve enjeksiyon olmalıdır. Pek çok durumda eczacı hastaları doğru sağlık kuruluşuna ve personeline yönlendirerek etik bir tutum sergilemektedir.*

**Anahtar Kelimeler:** Eczane eczacısı/Serbest eczacı, Eczacı(lar), Danışma, Yönlendirme.

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## INTRODUCTION

In Turkey the number of community pharmacies is approximately 23.000 (1), and there are 1340 retail pharmacies in Ankara (2). However of all the graduates of pharmacy faculties 77% choose to open a retail pharmacy and do their own business (3). Thus all the community pharmacies in the country and in Ankara are privately owned. Pharmacy education lasts four year (beginning from 2005 Fall semester the education will last 5 years) and in the end the ones who wish to work as a community pharmacist, perform their jobs according to the 6197 numbered “Act on Community Pharmacy and Pharmacists” (4). There had been added regulations to this act within years. In this context, according to item three of the *regulation indicating change on community pharmacies and pharmaceutical services*, the place that will be operated as a retail pharmacy should have its entrance door in the street and its front side should be again on the street (4). This is a great advantage which makes pharmacists easily accessible to the community members. On the other hand *Good Pharmacy Practice Guidelines* was published by the approval of Ministry of Health (MoH) General Directorate of Medicine and Pharmacy in 26.05.2000 (5). According to the mentioned guidelines pharmacist can provide counselling services when demanded. Forexample in a study done by Özçelikay and Çok, 25% of the retail pharmacists stated there are people demanding counselling on AIDS disease (6). In another study, 18.84% of the consumers stated that they had their blood pressured measured in pharmacies. Also 6.98% got injections at least once in a pharmacy (7)

Pilnick indicated that ‘Patient counselling’ by pharmacists is a diverse and ill-defined activity. In practice, it ranges from simply stating the dosage of a drug as it is handed over to the client, through counter prescribing for common ailments, to giving advice with regard to lifestyle and health promotion issues, like smoking cessation, cholesterol testing and contraception. Patient counselling has a central part to play in the ‘extended role’, which is seen as the way forward for the profession. Through counselling, it is hoped both that clients will be equipped with the resources to use any medications more safely and effectively, and that the perception of the pharmacist as the ‘first port of call’ for general advice on medicines and health will become commonplace (8).

As a consequence of the advancements in pharmacy profession in the last five decades, there had been changes in the traditional role of the pharmacist (compounding and dispensing of drugs) and pharmacist’s being an information source on medicines, providing this information on the right time and in the right place, counselling activities became significant tasks. In Turkey as in other countries (South Africa, United States of America and England) community pharmacies are the first port for the community to counsel on various health issues (9-11). However in Turkey studies revealing on what other subjects patients/patient relatives/consumers/ counsel to the pharmacists other than medicines are very limited.

In this study we aimed to get clues on whether people make visits to the pharmacy on issues rather than drug purchasing and drug related information. Besides to find out on which issues people counsel to the retail pharmacists; whether the pharmacists can be helpful on every issue that people counsel; when they cannot be helpful to the customer/patient which way they

follow; when trying to be helpful to the individuals do the pharmacist follow an ethical approach are aimed at.

We made a distinction between drug related information activities and non-drug related counselling activities like that: Drug related information included the effect of drug, adverse reactions, side effects and use of drug. Whereas non-drug related counselling activities encompass information seeking on minor diseases, on herbal medicines, nutrition, getting injection, blood pressure measurement, etc.

## EXPERIMENTAL

A random sample of 245 pharmacies was selected from a list of the 1340 community pharmacies registered with the Ankara Chamber of Pharmacists. When determining the sample size for this study, the formula given below was used (12):

$$n = \frac{Nt^2pq}{d^2(N-1) + t^2pq}$$

N: Number of subjects in the population

n: Number of subjects that will be included into the sample

p: Rate of events under investigation

q: 1-p

t: Tabulated t value with a given degree of freedom and significance level

d: Tolerable error

A self-administered questionnaire was distributed by pharmacy students to a total of 245 community pharmacists in Ankara. But the final number of pharmacists included in the survey was 231 due to rejection to participate and exclusion of some questionnaires. The questionnaire consisted of eight close-ended and five open-ended questions was distributed. Close-ended questions were on gender, education level (whether the participant got masters degree or doctor of philosophy degree), the length of being a community pharmacist, the length of being a pharmacist in his/her region, whether people counsel on issues other than drugs, which non-drug related issues are counselled, whether the pharmacist can be helpful on every issue that is counselled, when he/she cannot be helpful does he/she find the way he/she follows true. Open-ended questions were on age, graduated from which school of pharmacy, the issues that the pharmacist cannot be helpful to the people, which way he/she follows when he cannot be helpful on the counselled issue, the suggestions on the surveyed topic. Eight pharmacy students in Ankara University School of Pharmacy who had completed their normal duration of formal pharmaceutical education but trying to pass their few left lectures were chosen to visit the pharmacists in order to have the questionnaires completed. A one day training course were given to those students by the authors of this article on the following subjects; what quantitative research is; how to make visits to the community pharmacists; how to introduce themselves to the pharmacists; how to complete the

questionnaire survey and how to overcome the possible handicaps when collecting data. Data were collected during March-April 2003 and evaluated by SPSS (ver. 10)<sup>®</sup>. This study is a cross-sectional study.

## RESULTS

Of the 245 pharmacists 9 refused to participate to our survey. And 5 questionnaires had to be excluded from the study as they were filled out insufficiently. Thus the participation of the pharmacists to our survey was 96.25%. Of the pharmacists 54% were female. Their age range was between 21 and 65. Median age was 43. Of the pharmacists 7.4% had a Master of Science degree. All these data and the rest of the pharmacists' demographical characteristics can be seen in the table below (Table 1).

**Table 1.** Demographical Characteristics of Pharmacists

CHARACTERISTICS	N	%
<b>Gender</b>		54.0
Female	125	46.0
Male	106	
<b>Age</b>		17.3
≤30	40	28.6
31-40	66	35.1
41-50	81	16.9
51-60	39	2.2
>60	5	
<b>Education</b>		
Licensed	214	92.6
With a MSci degree	15	6.5
With a PhD degree	2	0.9
<b>Graduated from</b>		
A pharmacy school in Ankara	189	81.8
A pharmacy school in another city	42	18.2
<b>Community pharmacist</b>		
≤5 yrs	49	21.2
6-10 yrs	49	21.2
11-15 yrs	46	19.9
16-20 yrs	48	20.8
>20 yrs	39	16.9
<b>Total</b>	<b>231</b>	<b>100.0</b>

Of the pharmacists 96.1% stated that community members come to their pharmacy in order to counsel on other issues rather than drug purchasing and drug related matters (Table 2).

**Table 2.** Visiting Community Pharmacies on Various Issues rather than Drugs

<b>Do individuals visit your pharmacy rather than drugs?</b>	<b>n</b>	<b>%</b>
Yes, there are people visiting the pharmacy on many issues rather than drugs.	222	96.1
No, there is no one visiting the pharmacy on many issues rather than drugs.	9	3.9
Total	231	100.0

Community pharmacists are counseled mostly in the following subjects: Minor health related issues (25.36%), commenting on lab tests (23.53%) and suggesting a physician (22.61%) (Table 3).

**Table 3.** Counseling Services Pharmacists Provide Except Medicines

<b>Counseling services</b>	<b>n*</b>	<b>%</b>
In minor health related issues	194	25.36
Interpretation of lab tests	180	23.53
Suggesting a physician	173	22.61
Disease diagnose	160	20.92
Blood pressure measurement, glucose level measurement, injection	26	3.40
General issues (family, political, alcohol dependence, financial problems, cosmetics, nutrition, diet, address, assistant search for geriatrics, advice on choosing a profession profession profession)	19	2.48
Co-payment shares, prescription date and price, free of charge medicine demand	7	0.92
Herbal therapy	6	0.78

\* Pharmacist indicated more than one service

**Table 4.** Issues Pharmacists cannot be Helpful

Issues	n*	%
Disease diagnose	79	41.58
Interpretation of laboratory tests	54	28.42
Suggesting a physician	17	8.95
Counseling on minor health related matters (pregnancy prevention methods and ending pregnancy, pain management, surgical interventions, medical terms, family problems)	14	7.37
Giving injection	6	3.16
Providing medicines free of charge	5	2.63
Herbal therapy	1	0.52

\* Pharmacist indicated more than one issue

The community pharmacists stated that they cannot help consumers especially on diagnosing a disease (41.58%) and interpretation of laboratory tests (28.42%) (Table 4).

**Table 5.** Attitudes Followed by Pharmacists When They cannot be Helpful

Attitudes	n	%
Referral to the authorised person/body (hospital, physician, social establishments)	206	93.21
Searching the related scientific publications, mass media and internet	8	3.62
Applying to various other resources (more knowledgeable colleague, physicians, pharmaceutical wholesalers and professional organizations)	7	3.17

Pharmacists follow two ways when they cannot be helpful to the community members: Either referral to an expert (i.e. a medical doctor) or an institution (i.e. a hospital) (Table 5).

## DISCUSSION

Dispensing and handing over drugs to patients are not the only tasks required of community pharmacists.

Almost all of the pharmacists participating in the survey stated that people visit their pharmacies on a variety of subjects not only for drug purchasing and drug related issues (96.1%). The study revealed that community members mostly counsel the pharmacist on minor health issues and ailments. Similarly in a study done by Hassell et al. it is found that consumers mostly visit the community pharmacies on getting ailments in minor health issues (11). Studies done in

different countries indicate that community pharmacists serve to the public in a broad range of subjects like giving injections (13), monitoring the hypertension patients and controlling their blood pressure level (14), providing accurate and trustworthy information on herbal therapy to the community (15, 16), recommending nutritional supplements and smoking cessation products (17), and giving education to the drug abusers (18, 19). These findings are also parallel to the ones in our study (Table 3). Evaluation of records of telephone drug counseling by the Japan Pharmaceutical Association revealed that many callers desired not only drug information but also the opinions and judgements of pharmacists (20).

The reasons why people counsel to pharmacists on a variety of subjects can be numerous. First pharmacists are the most accessible healthcare professional, second there is evidence that consumers see the pharmacists knowledgeable (21) and third pharmacists are among the most trusted professionals. Likewise a study done by Krishnan and Schaefer revealed that patients value the information provided by the pharmacist (22). Again a survey was undertaken in the city of Maryborough (Australia) to investigate the use of pharmacies and general practitioners as sources of advice about skin problems. People in Maryborough are seeking advice for their skin conditions from a variety of sources including GP, pharmacies and others (23). In a study done by Cordina et al. in Malta public members were surveyed about their opinions on pharmacies and pharmacists. When asked to suggest new activities for community pharmacy, respondents were most in favour of the pharmacist offering more advice on the treatment of minor ailments (24).

In our study we found that when pharmacists cannot be helpful to the consumers almost all (93.21%) refer the individuals to the authorised person who is usually the medical doctor or to the hospital. A survey was carried out to determine the role of the community pharmacist in self-medication by the public. This included provision of advice on the use of medicines and on general health matters. Medicine sales during one trading day were recorded in 57 pharmacies in the Wellington area. 58.6 percent of customer requests for medicine or advice resulted in the sale of a medicine without additional advice. The remaining 41.4 percent of contacts were accompanied by advice from a pharmacist whether a medicine sale was made or not. Of the total advised contacts, 7.8 percent resulted in referral to seek medical advice and 9.8 percent were for general health advice with no sale of a medicine. The results of the survey suggest an important role for the community pharmacist as an adviser in self-medication and in the screening of minor illness (25). We can conclude from our data that pharmacists act in an ethical way by referring the individuals to the authorised person/body when they cannot be helpful.

## **CONCLUSION**

It is clear from our survey that community members counsel a lot to community pharmacists on various issues. Thus the role of the retail pharmacists is not only limited to drug selling and counselling on drug related issues. Pharmacists can play an important role when giving advice on

minor health related issues, interpretation of laboratory tests and suggesting the right specialised physician on the target organ/disease. Also they can have a significant impact on community in terms of public health and improving patient's quality of life.

In today's world it is not as in the old days. Pharmaceutical services and their extent has changed a lot. These services are now patient centered instead of being drug centered. The social role of community pharmacists has expanded parallel to the above mentioned developments in pharmaceutical profession. As the most accessible healthcare professionals, pharmacists are in a unique position to provide a wide variety of services rather than selling medicines and medicine related advice giving. The findings of this study provides important clues for exploring the activities of pharmacist further in future studies and organize the continuing education programmes for the pharmacists accordingly. Thus bearing in mind on which topics pharmacists are counselled most, these healthcare professionals will be more ready to meet the changing needs of the community members.

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