



ASSESSMENT OF SELF MEDICATION PATTERN OF PHARMACIST IN ASEER REGION, SAUDI ARABIA

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Background: Self-care and self-medication raise the issue of the responsibility of consumers and patients to ensure that the care or medication they select is appropriate to their needs, safe and effective. Equally, they pose several questions for pharmacists.

Objective: The purpose of this study was to evaluate and characterize the perceptions of pharmacists about self medication pattern of drugs in the patients.

Method: It was a cross sectional study which involved the pharmacist (n=87) working in community pharmacies and the hospital pharmacies who self medicate the patients. A structured questionnaire was prepared which consisted of the basic details of the pharmacists and questions regarding the attitude of the pharmacists regarding the self medication for evaluation.

Results: The majority of the pharmacists were Egyptian (68.96%), with a Bachelor degree (86.2%). Pharmacist indicated that self medication was found to be common among adult (67.81%) males (73.56%). Economical reasons (67.8%) and time saving (58.6%) were cited as an important reason for self-medication. Headache, cough, fever and cold were major conditions for which self-medication was sought by patients and pharmacist justified dispensing of drug for self-medication by patients as the conditions being simple and unwarranted intervention of physicians.

Conclusion: There is a need for self-medication in self-care; hence the role of the pharmacist must be extended. To address this issue, the pharmaceutical societies regulatory agencies should discuss communication, evaluation, quality, screening, training and supervision, collaboration and performance review of the pharmacist to make them more competent for independent prescribing in self-medication in self care by patients.

INTRODUCTION

All over the world, millions of people visit pharmacies for their daily health care needs. Pharmacists are placed at the first point of contact in the healthcare system due to their easy accessibility¹. Non-medical prescribers are a large and growing workforce. Improving patient access to medicines and making best use of the clinical skills of non-medical health professionals, particularly pharmacists and nurses, are among the aims of recent changes in prescribing legislation in Great Britain². In many developing countries, pharmacists and pharmacy attendants play an important role in fostering self-medication among the public³.

Pharmacies (chemist shops and drug stores) are not only sites where medicines are bought and sold, they are also places where information and advice on common health problems and treatment is sought routinely⁴ this may be due to the change in role of the pharmacist over the past two decades. Pharmaceutical care is growing in importance with the challenges of self-care. For pharmacists, their greater involvement in self-care means greater responsibility towards their customers and an increased need for accountability⁵. However a major short of self-medication is the lack of clinical evaluation of the condition by a trained medical professional, which could result in missed diagnosis and delays in appropriate

treatments⁶. On the other hand independent prescribing for pharmacists is a more recent development and permits the management of diagnosed and undiagnosed conditions, prescribing any licensed medicine (other than controlled drugs) within the pharmacist's competence, with no need for formal medical collaboration⁷. Laws regulating the profession of pharmacy in Saudi Arabia demands professionalization of pharmacy operations and prohibit the practice of pharmacy by persons other than licensed pharmacists. In addition, a pharmacist is required to dispense drugs on prescription only, except those drugs defined as OTC⁸. However, a study conducted in the eastern province of Saudi Arabia by Al-Freihi *et al.*⁹ draws attention to the potential for drug misuse due to the lack of adherence to this regulation governing the dispensing of drugs by community pharmacies. Taking into consideration the policies, initiatives, that have been developed to improve safety of prescribing by pharmacist in countries such as Great Britain and the lack of adherence in prevailing regulation in Saudi Arabia and transforming role of pharmacist to improve patients access, adherence, and self-management of medication, it was thought worthwhile to evaluate the perceptions of pharmacists in response to self-care and self-medication needs.

MATERIALS AND METHODS

Study design

It was a Cross sectional study which involved the pharmacist (n=87) working in community pharmacies and the hospital private pharmacies who self medicate the patients. A structured questionnaire was prepared and which consisted of the basic details of the pharmacists and questions regarding the attitude of the pharmacists toward the self medication. Pharmacies from various parts of the Aseer Region and pharmacists of different nationalities were selected and the questionnaire was given to the participants and the participants were asked to fill the questionnaire. This study was carried out between February – May, 2014. Data was analyzed using Microsoft Excel. Data were expressed as mean (standard deviation) for continuous variables and as frequency for categorical variables.

RESULTS AND DISCUSSION

Results

Characteristics of the study population

A total of 87 pharmacists who met the selection criteria completed the survey. Socio-demographic data of the respondents were shown in table 1. The majority of the pharmacists were Egyptian (68.96%), others were Yemani (9.19%), Jordanian (8.04%), Saudi (4.59%), Syrian (3.44%), Indian (2.29%), Sudani (2.29%), and Bangladeshi (1.14%) and 86.2% were holding a Bachelor degree, (10.34%) were Master and (3.4%) were holding PharmD degree.

Table 1: Demographic Characteristics (n= 87).

Characteristics		Number	%
Type of Pharmacy	Chain Pharmacies	49	56.32
	Single Pharmacy	22	25.28
	Hospital Pharmacy	16	16.49
Nationality of Pharmacist	Egyptian	60	68.96
	Yemani	8	9.19
	Jordanian	7	8.04
	Saudi	4	4.59
	Syrian	3	3.44
	Indian	2	2.29
	Sudani	2	2.29
Educational Level	Bachelor	75	86.20
	Master	9	10.34
	PharmD	3	3.44
	Professional Experience	0-5 years	15
5-10 years		32	36.78
10-15 years		33	37.93
Above 15 years		7	8.04

Characteristics of patients who adopt self medication practice as indicated by pharmacists

Self medication was found to be common among males (73.56%) and females (26.43%). The majority of them were adult (67.81%), elderly (18.39%) and children (13.79%) (Table 2)

Table 2: Characteristics of patients who adopt self medication practice.

Characteristics	Status	Number= 87 (%)
Gender	Male	64 (73.56)
	Female	23 (26.43)
Age (years)	Adult	59 (67.81)
	Elderly	16 (18.39)
	Children's	12 (13.79)

Responses on reasons for self-medication

Reasons are shown in table 3 these include illness is minor, seeking quick relief, time saving, economic cost, privacy, no hospital nearby and the condition does worth seeing physicians.

Table 3: Reasons for self medication.

Reasons	Number	%
Economic Cost	59	67.8
Time Saving	51	58.6
Mild illness	42	48.3
Privacy	10	11.5
Quick relief	23	26.4
No hospital nearby	25	28.7
Conditions does not worth seeing physician	22	25.3

Pharmacist preferred to give drugs for patients described symptoms associated with pain (head, gastric, body), cough, fever, allergy and other indications described in table 4.

Categories of the agents commonly dispensed for self-medication are indicated in the figure 1. Most of patients ask for self medication by mentioning the symptoms (63.2%), others by mentioning the color/shape/dosage form/price of the medicines (58.6%), and the least by generic name of the drug (10.3%) as shown in figure 2. Figure 3 give the justification of pharmacist for self medication.

Table 4: Pharmacist preferences drug indications for self-medication.

Symptoms	Number	%
Head Ache	69	79.31
Cough	67	77.01
Fever	41	47.13
Influenza	43	49.43
Gastric Pain	32	36.78
Allergy	28	32.18
Diarrhea	41	47.13
Constipation	41	47.13
Body Pain	41	47.13
Peptic ulcer disease	17	19.54
Gastro esophageal reflux disease	10	11.49
Fungal/Microbial infections	8	9.20
Sex Related Problems	12	13.79
Contraception	5	5.75
Insomnia	6	6.90

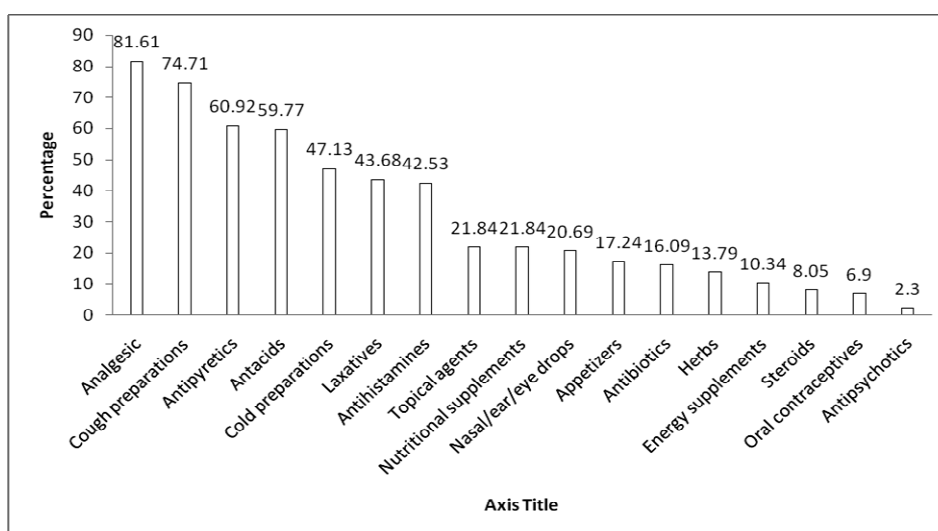


Fig. 1: Categories of the agents commonly dispensed for self-medication.

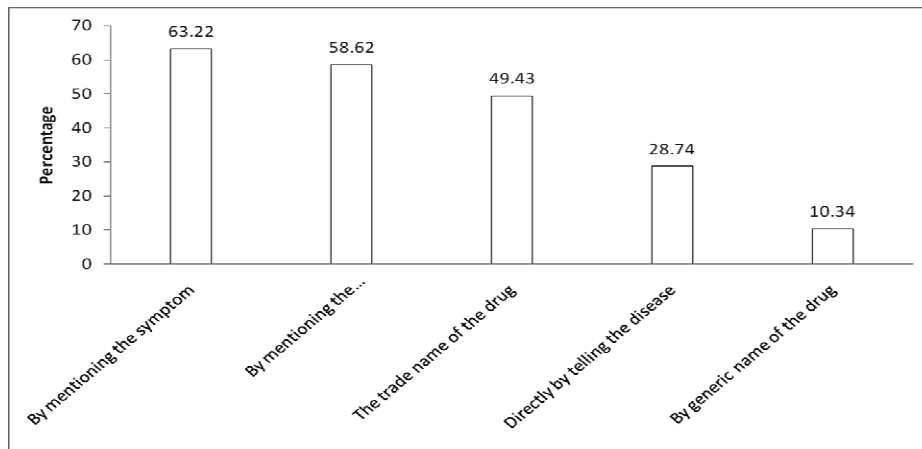


Fig. 2: Ways by which the patients ask for self-medication.

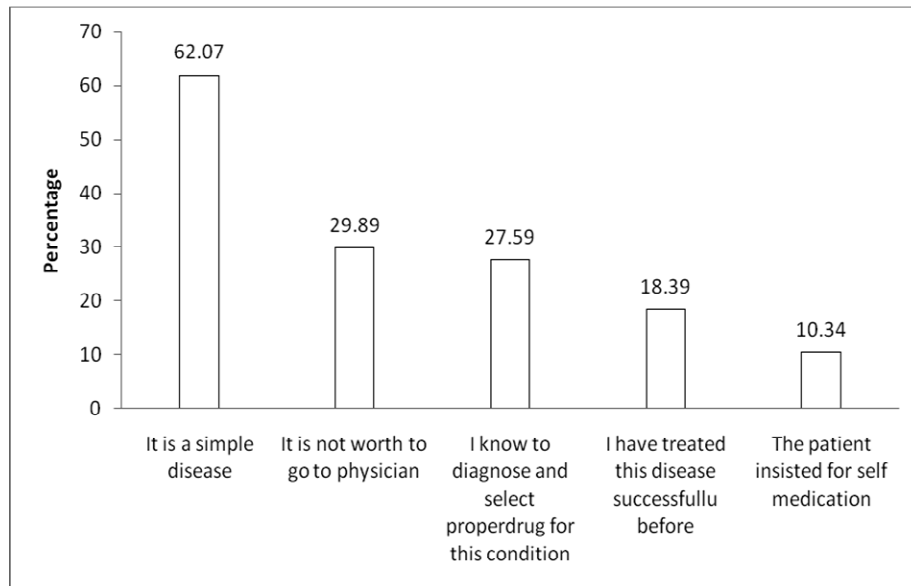


Fig. 3: Pharmacist justification for self-medication.

Discussion

Majority of the respondents had the Bachelor of Pharmacy degree with 10 to 15 years post qualification experience. There were only male respondents in spite of conducting the study among different practice setting. The current results are in agreement with previous study¹⁰ however our results differ when compared to a study¹¹ which found a higher prevalence of female pharmacists, which was in accordance with theories of feminization of the profession in Brazil. Males were found to

self medicate more (73.56%) than females (26.43%).

Practices of self medication were found more in age group of adults (67.81%). These results are in agreement with the previous study¹² however some studies demonstrate no association between age and self medication¹³.

In current study demonstrate self medication was found to be common among males and females, however another study demonstrate that females self medicated more than males¹⁴ this may be due to the fact that

restricted movement outside the house and a secondary status in the household, however a study by Saeed (1988)¹⁵ revealed no association between gender and self medication. Though the common reason for self-medication demonstrate is economical reason despite the fact that most of the population in Saudi Arabia are eligible for free public health services apart from time saving and mild illness (symptoms) in some cases, the main reasons could be triviality of the symptoms, to save money and time, lack of gravity to go and see a physician because they can take care of themselves or previous medical prescription for related symptoms are associated with self medication¹⁶. In the present investigation pharmacist cited varieties of conditions such as head ache, cough, fever, influenza, gastric pain, allergy, diarrhea, constipation and body pain other conditions demonstrate in table 4 as common ailments for which the patients seek self-medications, and these results are inline with the previous studies^{17&18}. Several medications reportedly used for this practice include analgesics, cough preparations, antipyretics, as major drug category and the least was oral contraceptive and antipsychotics as shown in figure 1. Trade name, color, shapes and by indicating the symptoms to the pharmacist were common means of identification and less frequently by generic names by the patients. The ability of the patient to recognize the drugs by their trade name or generic name may be attributed to the fact that most of the patient who self medicated may be educated and these results are in agreement with the previous study¹⁹, however those with low education recognized the drugs with color and shape of the drug. The majority of the pharmacists had a positive attitude towards self-medication, saying that it was acceptable and that those condition for which the patients approach for medications are simple diseases which does not worth consulting a physician and that he as a pharmacist has treated such conditions earlier successfully and that he has adequate knowledge to do so. A study on patient self-care and roles of pharmacists indicated the importance of patients to self-care of their chronic conditions and they also supported pharmacists to be involved in patient self-care and take a major role in managing patients'

medication issues²⁰. However pharmacy professionals also need directions concerning how they can best fulfill their responsibilities, not only at community level, but also through the development and distribution of drugs. In addition, ethical, regulatory and quality assurance aspects should be addressed, as well as consumers' attitude and perceptions. To ensure up-to-date quality service, the pharmacist must be encouraged to participate in continuing professional development activities such as continuing education.

Conclusion

The pharmacist can play a key role in helping people to make informed choices about self-care, and in providing and interpreting the information available. However for community pharmacist who do not contact with medical team on regular basis there is a need to demonstrate their professional competence such that their consultation skills are evaluated. This can be possible only when mechanisms are developed by policy makers and regulatory agencies to explore and evaluate the pharmacist prescribing in the self medication and self care by the patients.

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القيمة الذاتية لتقييم صرف الادوية لاجل الرعاية الذاتية والتطبيب الذاتي للمرضى بواسطة الصيدلاني في منطقة عسير بالمملكة العربية السعودية

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الرعاية الذاتية والتطبيب الذاتي تثير قضية مسؤولية المستهلكين والمرضى للتأكد من أن الرعاية أو صرف الأدوية التي تختارها هي المناسبة لاحتياجاتهم وأمنة وفعالة. كان الهدف من هذه الدراسة هو تقييم وتوصيف تصورات الصيادلة حول نمط العلاج الذاتي من الادوية التي يتم صرفها للمرضى. شملت الدراسة على عدد من الصيادلة (عددهم = 87) الذين يعملون في صيدليات المجتمع وصيدليات المستشفيات والذين يقدمون الخدمات الصيدلانية الذاتية لمداواة المرضى. وقد تم إعداد استبيان منظم الذي يتألف من التفاصيل الأساسية للصيادلة وأسئلة بخصوص الموقف من الصيادلة بشأن العلاج الذاتي للتقييم. كان النتائج لهذه الدراسة بان الغالبية العظمى من الصيادلة العاملين في منطقة عسير هم من الجنسيه المصريه ويمثلوا اعلى نسبة (68,96%)، والحاصلين على درجة البكالوريوس في الصيدله بنسبة (86,2%). وأشارة الدراسة بعد الايضاح من الصيادلة بانه معظم المرضى الخاضعين للعلاج الذاتي هم من كبار السن ونسبتهم (67,81%) خصوصا من الذكور (73,56%). ولأسباب تعود الى أسباب اقتصادية (67,8%)، وتوفير الوقت (58,6%)، وهي من احدى اهم الأسباب المهمة للتطبيب الذاتي. معظم المرضى كانوا يعانون من الصداع والسعال والحمى والبرد وهي الامراض الرئيسية التي طلبت لاجل التطبيب الذاتي من قبل المرضى وتم صرف الادويه المناسبة من قبل الصيادله لاجل التطبيب الذاتي للمرضى وحيث أن ظروف صرفها بسيطه ولا داعي الى وصفها من قبل الاطباء. لذا هناك حاجة ماسه الى التطبيب الذاتي في الرعاية الذاتية. كما يلعب الصيدلاني دور كبير في صرفها وسلامتها الى مرضى التطبيب الذاتي لمعالجة مثل هذه المسألة الطبيه، لذا ينبغي للمجتمعات الطبية والهيئات التنظيمية للأدوية مناقشة الاتصال والتقييم والجودة والفحص والتدريب والإشراف والتعاون واستعراض أداء الصيدلي لجعلها أكثر كفاءة لوصف الدواء مستقل في التطبيب الذاتي في الرعاية الذاتية من قبل المرضى.