

## Patients' Perceptions of Community Pharmacy Practice in UAE: An Overview

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**ABSTRACT:** Only few pharmacists are viewed by the public as the preeminent health care professionals responsible for the use of medicines in the prevention and treatment of disease or rational medication. Study's objectives were to explore patients' perceptions of community pharmacists practice and roles and evaluation of the services provided by community pharmacists. In addition, investigate patients expectations of the community pharmacists in Ajman and Sharjah cities, as well as obstacles facing community pharmacy setting for the application of pharmaceutical care from patients perspectives. 500 cross sectional surveys distributed to patients visiting community pharmacies. Descriptive analysis was conducted using SPSS version 20. The response rate was 77% in which out of the 500 questionnaires distributed the total number of usable data was 385. 41 (10.6%), thought that pharmacists are primarily business people who are more concerned with making money. Forty nine percent (091) of patients thought that there is no privacy maintained concerning prescriptions and medications. 66(17.1%) of patients believed that the main barrier to approaching pharmacists is that doctors are more trusted. Improving perceptions and attitudes of patients, pharmacists and physicians towards the role of pharmaceutical care in improving patient overall health is essential. Community pharmacists roles must be expanded and they must look for new challenges in their profession in order to improve their experience and capabilities.

**(KEYWORDS:** community pharmacists, pharmaceutical care, attitudes, perceptions, obstacles)

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### I. INTRODUCTION

Only few pharmacists are viewed by the public as the preeminent health care professionals responsible for the use of medicines in the prevention and treatment of disease<sup>(1)</sup>. In order for all pharmacists to be the preeminent health care professional, pharmacists should get appropriate education and clinical skills<sup>(2)</sup>. Many studies were conducted to explore patients' expectations and perceptions of community pharmacists<sup>(4, 5, 6, 7, 8, 9, 10)</sup>. Results of the previously cited studies suggested that the public has a poor understanding of the community pharmacists' roles, and that pharmacists had minimum interaction with patients<sup>(3)</sup>

A study by **El Hajj et al. 2011**, to assess the public's attitudes towards the community pharmacist's role in Qatar, the physician was considered the first person to contact to answer drug-related questions by 50% of respondents. When asked about their views about community pharmacy services in Qatar, only 37% agreed that the pharmacist gave them sufficient time to discuss their problem and was knowledgeable enough to answer their questions<sup>(10)</sup>. This agrees with other Studies which have shown that a large proportion of the public do not consider advice- or information- giving as the primary role of pharmacists, but rather the dispensing of medicines<sup>(4, 6, 7, 9)</sup>. More than 70% didn't expect the community pharmacist to monitor their health progress or to perform any health screening which agrees with **Iverson et al. (2001)** where participants were less supportive of pharmacist involvement in monitoring long-term illness, and fewer than half of respondents were in favor of pharmacist access to patient medical records (35%)<sup>(5)</sup>. Another study by **Boardman et al. (2005)**, surveyed patients to investigate the use of community pharmacy. Results suggested that patients' health and social class influenced their visits to community pharmacy. In this study 59 percent of respondents had collected a prescription medicine and 40 percent had purchased an over-the-counter (OTC) medicine from a pharmacy, whereas only 12 percent had asked for advice. Purchasers of OTC medicine were more likely to be younger and from higher socio-economic classes, whereas those who collected prescription medicine were more likely to be older. Medicines to treat cold and flu symptoms were the most frequently reported purchase type. Only a small number of respondents who asked for advice had not also obtained medicine. Respondents who asked for advice were more likely to have asked about a specific medicine or illness than to have asked for general health advice<sup>(8)</sup>.

Barriers to pharmacist- patients communication were investigated in a study by **Kansanaho et al. (2004)**, 80% of the patients agreed on their need of good communication with community pharmacists in order to receive counseling on medication use<sup>(11)</sup>. Unfortunately, patient pharmacist communication is low<sup>(12)</sup>. A study by **Assa & Shepherd, (2000)**, found that pharmacists and patients were found to disagree on the potential benefits of pharmaceutical care services. Pharmacists tended not to understand their patients' perceptions. It also concluded that having different understanding of the importance of pharmaceutical care services causes a major issue in providing pharmaceutical care services<sup>(13)</sup>. There are limited published data available about the provision of pharmaceutical care in community pharmacies in the UAE<sup>(14)</sup>. Almost no documentation of efforts was taking place in community pharmacy<sup>(15)</sup>.

## **II. OBJECTIVES**

This study is to explore patients' perceptions of community pharmacists practice and roles, as well as, evaluation of the services provided by them. In addition, investigate patients expectations of the community pharmacists in Ajman and Sharjah cities, with respect to obstacles facing them.

## **III. METHODS**

To accomplish the study's objectives, a descriptive cross sectional survey was distributed to patients visiting community pharmacies. Specific inclusion and exclusion criteria were applied, including patients visiting community pharmacies which were willing to participate in Ajman or Sharjah, older than 16 years old, male and female patients willing to participate in the study, patients living in UAE, and English or Arabic speakers. While excluding patients not willing to participate, pharmacies not willing to participate, Health care providers, patients with relatives who work in the health care fields, illiterates, patients who don't speak English nor Arabic, patients visiting UAE, and patients younger than 16 years old. According to the national bureau of statistics in 2010, the population of UAE is 8,264,070 in which around 1,062,186 live in Ajman and Sharjah. Sample size of the study was calculated on steps by referring to similar studies conducted in Qatar and UK<sup>(5, 10)</sup>. The calculated minimum sample size was (383n), and after adding 15% to the sample, the minimum sample size was (n=440) and the final chosen sample size was 500. Five community pharmacies were randomly selected from a list of community pharmacies, provided by MOH, and the study investigators contacted the selected pharmacies.

The developed questionnaire was designed to be interview -administrated and to be completed in 10 minutes. It comprised of five parts covering the Socio-demographic characteristics (which were age, gender, nationality, education and occupation), exploring patients perception on community pharmacists (views on pharmacist, who they seek for help in DRP and why, frequency of visits, reason of visit and the reason behind the choice of the visited community pharmacy), exploring patients' evaluation of community pharmacy services currently provided, exploring patient expectations about the community pharmacist's role, and a part exploring the barriers of communication between pharmacist and patients. In addition, a final open-ended question invited the respondents to suggest possible ways to improve community pharmacist and patient relationship. The questionnaire was initially developed in English language. Two native Arabic pharmacists translated the questionnaire to Arabic and doubled checked the translation. Another two native Arabic pharmacists translated the questionnaire back to English to ensure accuracy.

Five recruited pharmacists were requested to distribute and collect the samples with the researcher. The 5 pharmacists were trained to administer the questionnaire in a face-to face interview; they were trained for 2 hours in an accumulative session in order to adopt understanding and uniform questionnaire administration. The recruited pharmacists distributed the questionnaires to patients visiting community pharmacies between January 2013 and April 2013. The investigators visited selected pharmacies on different days of the week and at different times of the day to encounter a wide cross section of the community. Patients visiting the participating community pharmacies were randomly approached, provided with the study objectives, assured about data confidentiality and anonymity, and were requested to participate. Patients who offered oral consent were anonymously interviewed for 10 minutes in English or Arabic based on the patient's spoken language using a multipart pretested survey. Individuals who did not offer oral consent or were not able to answer the survey questions due to language barriers were excluded. The interviewer intervened only to clarify a question, if required. No attempt was made to prompt the respondents by suggesting answers directly. In this study the data analysis was conducted using SPSS version 20. Instituting identification numbers were given for all questionnaires. All questions and variables categories were coded. The items were checked for accuracy by examining unusual coding values and 10% of returned surveys were randomly selected for hand checking by an independent person. Descriptive analysis was used to analyze the Socio-demographic data.

The descriptive statistics included mean, median, standard deviation and frequency. Results were presented as numbers with percentages or graphic presentations for categorical variables. Ethical standards for conducting the study were maintained and informed consent from participants was obtained prior to conducting the study, Confidentiality of participants was maintained at all times, Participants' information obtained from the questionnaires was kept confidential, Participants' were informed that participation is voluntary and they could withdraw from the study at any stage.

#### IV. RESULTS

The response rate was 77% in which out of the 500 questionnaires distributed the total number of usable data was 385.

Table 4.1: Socio-demographic data of patients.

Characteristics	N(%)		
	Female	Male	Total
<b>Gender</b>	157(40.8)	228(59.2)	385(100)
<b>Age</b>			
< 30 years	102(65)	87 (38.2)	189(49)
30-50 years	51(32.5)	109(47.8)	160(41.6)
> 50 years	4(2.5)	32 (14)	36(9.4)
<b>Nationality</b>			
UAE	26(16.6)	6(2.6)	32(8.3)
Gulf	28(17.8)	5(2.2)	33(8.6)
Southeastern Asia	11(7.0)	66(28.9)	77(20)
Arab	69(43.9)	129(56.6)	198(51.4)
Others	23(14.6)	22(9.6)	45(11.7)
<b>Educational Level</b>			
less than high school	15(9.6)	54(23.7)	69(17.9)
High School	38(24.2)	77(33.8)	115(29.9)
Technical college	26(16.6)	20(8.8)	46(11.9)
Undergraduate	57(36.3)	61(26.8)	118(30.6)
Postgraduate	21(13.4)	16(7.0)	37(9.6)
<b>Occupation</b>			
Social sciences, education, government service, & religion	26(16.6)	73(32)	99(25.7)
Business, finance, and administration	23(14.6)	10(4.4)	33(8.6)
Housewife	32(20.4)	0	32(8.3)
Student	48(30.6)	8(3.5)	56(14.5)
Natural and applied sciences	5(3.2)	13(5.7)	18(4.7)
Health Sciences	3(1.9)	5(2.2)	8(2.1)
Sales and services	10(6.4)	46(20.2)	56(14.5)
Art, culture, recreation and sports	0	3(1.3)	3(0.8)
Trade, transport and equipment operators	1(0.6)	38(16.7)	39(10.1)
Management	9(5.7)	32(14.0)	41(10.6)

From table 4.1, 228(59.2%), of patients participating in the study were males. Fifty percent of patients (189) were less than thirty years old. Fifty one percent patients were Arabs (198). Also, 115(29.9%), of patients had high school diploma, 118(30.6%) of patients had undergraduate certificate. When patients were asked about their opinion on community pharmacist only, 41 (10.6%), thought that pharmacists are primarily business people who are more concerned with making money. Only thirty one percent (119) of patients turn to community pharmacists for advice when having a DRP. When patients were asked about the reason for their choices, 32 (8.3%), felt that physicians are more knowledgeable, 15 (3.9%), felt that the physician is the prescriber, 13 (3.4%), wanted to share family experiences and medications which rose the problem of self-mediations, and only, 27 (7%), stated that pharmacists know all about medications. Most patients came to pharmacy to get either POM, 125 (28.1%), or OTC medications, 132 (31.9%). One fifty four (27.8%), patients stated that the main reason for choosing a community pharmacy to visit was the location of pharmacy.

Table 4.2: Patients' views on pharmaceutical services currently provided by community pharmacies.

Statement	n (%)		
Patient views of community pharmacy services currently provided	<b>Strongly agree and agree</b>	<b>Neutral</b>	<b>Disagree and strongly disagree</b>
When I am in the pharmacy I feel totally at ease about asking the pharmacist for advice	77(20)	33(9)	275(71)
When I am buying my prescription medications, the pharmacist hands me my prescriptions, provides me with thorough medication counseling, and encourages me to ask questions	163(42.5)	33(8.5)	189(49)
When I am buying my prescription medications, privacy concerning my prescriptions is maintained by the pharmacist	156(39.7)	39(10)	190(49.3)
When I go to the pharmacy with a problem the pharmacist gives me enough time to discuss my problem and listens to me carefully	138(36)	36(9)	211(55)
When I go to the pharmacy to ask any drug-related question, the pharmacist is knowledgeable enough and always ready to answer my questions	152(39.5)	28(7.3)	205(53.2)

From table 4.2, patients were asked about their views on services currently provided. Forty nine percent (091) of patients thought that there is no privacy maintained concerning prescriptions and medications. Also, only 77 (20%) thought that they feel at ease about asking pharmacists for advice.

Table 4.3: Patients' expectations of community pharmacists.

Statement	N (%)		
Patient expectations about the community pharmacist's role	<b>Strongly agree and agree</b>	<b>Neutral</b>	<b>Disagree and strongly disagree</b>
Initiate dialog with me or with my physician, when necessary to obtain a sufficiently detailed medication history	247(64)	20(6)	118(30)
Counsel me about my disease	217(56)	5(1)	163(42)
Counsel me about the main side effects of my medications and how to avoid them and about their potential interactions with other medicines	223(58)	0	152(42)
Counsel me about the directions for use of medications	265(69)	0	120(31)
Counsel me about the medications' action and indication	234(61)	35(9)	116(30)
Monitor my health's progress to ensure the safe and effective use of medications	177(46)	30(8)	178(46)
Help me in selecting a home diagnostic, an over-the-counter medication or a para-pharmaceutical product, eg, baby care, hair products, cosmetics, etc	235(61)	20(5)	130(34)
Answer my drug-related questions	285(74)	20(5)	80(21)
Counsel and advise me on the treatment of minor ailments; for example, headache, heartburn, constipation, muscle pain, minor skin problems etc	268(70)	23(6)	94(24)
Check my prescriptions for accuracy in terms of drug name and dose	287(75)	10(2.5)	88(22.5)
Label my medications with dose and use instructions	279(72)	10(2.5)	96(25)
Perform proper screening and monitoring for specific health conditions and diseases. Example, measuring blood pressure, blood sugar	209(54)	15(4)	161(42)

From table 4.3, patients were asked about their expectations of community pharmacists. Sixty four percent (247) of patients were in favor of communication with them and their physicians. Sixty one percent

(234) of patients expected pharmacists to counsel them on medications' actions and indications. Seventy percent (268), of patients thought that pharmacists should advice them on minor ailments. Seventy two percent (279), agreed that pharmacists should label the medications with dose and use instructions. Two hundred and four (53%), participating in the study thought that pharmacists are hard to approach.

Table 4.4: Patients' perceived barriers of approaching a community pharmacist.

Patients perceived barriers of communicating with community pharmacists	N(%)
Lack of privacy in the pharmacy	15(3.9)
Doctors are more trusted than pharmacists	66(17.1)
Busyness of the pharmacist	35(9.1)
Fear or intimidation of asking the pharmacist	4(1)
Lack of awareness of the ability of the pharmacist to answer drug and disease-related questions	36(9.4)
Lack of pharmacist's knowledge to answer drug- and disease-related questions	36(9.4)
Unavailability of the pharmacist to answer my questions	13(3.4)
Rudeness of the pharmacist	3(0.8)

From table 4.4, 66(17.1%) of patients believed that the main barrier to approaching pharmacists is that doctors are more trusted.

## V. DISCUSSION

This study is the first in UAE to evaluate perceptions of the public towards community pharmacists, roles and services pharmacists provide. The study looked at the relationship between patients and community pharmacists, the perceptions of patients, and the barriers assumed to weaken the communication between pharmacists and patients. In this study, access to the community pharmacies was mainly to either purchase POM ,125 (28.1%), or OTC medications ,132 (31.9%), while only around, 44 (11.4%), patients visited community pharmacies for advice. This is in line with other studies that have investigated public's perception towards community pharmacies in Middle East countries<sup>(8, 10, 16)</sup>. This finding can be explained by the fact that few community pharmacies in UAE have been fully engaged in patient centered promotion activities. This study also found that, 66 (17%), of patients ask their friends and family first when having a drug related problem, which is high comparing to another study in Europe where around 8% of participating patients choose friends and family as their first source of information<sup>(17)</sup>.

Almost half of the patients participating, 148(48%), turned to physicians first when having a drug related problem, this contradicts with the results of **Ibrahim et al. (2013)** study which have found that more than half of the respondents turn to community pharmacists. Unfortunately, this suggests a problem with patients and pharmacists relationship in UAE<sup>(16, 18, 19)</sup>. This finding highlights the importance of good communication with patients which increases patients' trust and confidence in pharmacists. In order to improve and strengthen patient pharmacist relationship, comprehensive and informative workshops must be done to address the public about the roles and abilities of pharmacists and precisely community pharmacists. In this study, around twenty seven percent (103) of patients believed that pharmacists have good balance between health and business matters, which is relatively low comparing to a study by **El Hajj et al. (2011)** where 44% of patients believed that pharmacists have good balance between health and business matters. Interestingly, 154 (27.8%), of patients in this study decide preference of community pharmacy depending on the location of the pharmacy rather than pharmacists' knowledge, 48 (12.5%). A large proportion of patients, 208 (54%), don't consider monitoring health progress and safe and effective use of medications as a part of the expected services of community pharmacists, this agrees to the results of another study by **El Hajj et al. (2011)** in which 70% of patients don't consider monitoring health progress, safe and effective use of medications as a part of the expected services<sup>(10)</sup>. These findings should encourage pharmacists and other relevant authorities to publicize the services that community pharmacists could provide to patients in community pharmacies

Effective communication by pharmacists is essential to ensure patient safety in terms of provision and use of medications by patients<sup>(21)</sup>. Seventy one percent (275) of patients participating in this study felt that pharmacist don't provide them with thorough medication counseling and don't encourage them to ask questions when getting their prescription medications. Unlike a study by **Singh et al. (1999)** in Trinidad, 70% of patients felt satisfied by the counseling provided by pharmacists<sup>(20)</sup>. This may indicate that UAE's community

pharmacists are dispensing prescription medications presuming that the patients are already well informed about their medical conditions. Also, in this study, only thirty nine percent (152) of patients thought that pharmacists are knowledgeable enough to answer all drug related questions. However, in a study by Singh et al. (1999) in Trinidad, 69% of patients felt that pharmacists have the skills and knowledge<sup>(20)</sup>. This could be due to the fact that UAE's community pharmacists are coming from diverse backgrounds and different pharmacy curricula. These curricula may not adequately prepare their graduates to take the role of pharmaceutical care providers. Therefore, universities in UAE should include pharmaceutical care in the undergraduate curricula and train students to implement this practice and apply this knowledge in future clinical practice. In addition, strong training programs and workshops must be organized as a part of the continuous medical education (CME) program.

## VI- CONCLUSION

Pharmacists should know that providing pharmaceutical care services to patients during the dispensing process has the potential to provide a valuable contribution to health care. Improving perceptions and attitudes of patients, pharmacists and physicians towards the role of pharmaceutical care in improving patient overall health is essential. Community pharmacists roles must be expanded and they must look for new challenges in their profession in order to improve their experience and capabilities. Also, it was noted that patients are able to evaluate pharmacists more than pharmacists can evaluate themselves.

## VII- LIMITATIONS

A convenience sample was used for this study and may not fully represent the whole public in UAE. Our focus was on describing perceptions held by people who use community pharmacies only. Further studies on other populations like those who use hospital pharmacies is warranted. As this was a voluntary survey, the responses may have contained self-reporting data inaccuracies resulting from intentional deception, poor memory, or misunderstanding of the question. Therefore, findings of this study should be interpreted with the limitations in mind.

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