

# Patients' Perspectives on Services Provided by Community Pharmacies in Terms of Patients' Perception and Satisfaction

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## ABSTRACT

**Objective:** To assess patients' perspectives towards community pharmacists as health care professionals by evaluating their performance in terms of patients' perception and satisfaction. **Methods:** Patients' perception and satisfaction are widely used healthcare direct pointers to evaluate Pharmaceutical health care services. To examine these two parameters, a questionnaire was developed, including statements to assess the patients' level of compatibility towards their community pharmaceutical care settings, along with their demographic data. The responses of patients' satisfaction and perception of pharmaceutical care settings were interpreted as percentages. **Results:** The responses of patient perception estimated that the pharmacist knows well how to use medication and warns about the dose or any problem in taking the medications before dispensing the medication. However, pharmacist is not an expert in suggesting treatment for minor ailments and he should not advise patients on general health issues other than drugs. Patients satisfied with the simple, clear and understandable language used by the pharmacist in discussing drug related issues and the kind of care and, kindness and respect in communication, nevertheless they least satisfied with the privacy maintained by pharmacist

while discussing with patients and dispensing medications. **Conclusion:** Patients' expectations from pharmacists as successful therapists with decent communication profiles were positively evaluated. Paradoxically, other aspects such as the amount of time spent with each patient and general health issues advice did not meet our prospects, which clarify the need for a more solid pharmaceutical health care system to meet the potentials for full patients' perception and satisfaction.

**Key words:** Satisfaction, Perception, Patients, Pharmacists, Pharmaceutical Care service.

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## INTRODUCTION

The healthcare system in Dubai is offering highest quality of services in both clinical and community settings. The advancement of the pharmaceutical services in Dubai healthcare system support publics' need, expectation and satisfaction. The government attributed by spending and undertaking a multimillion-dollar program to expand health facilities. According to the WHO, the total expenditures on health care constituted in 2004 were 2.9 percent of Gross Domestic Product (GDP) and health services. The regulatory bodies and healthcare professionals are keen about patient's satisfaction and fulfilling his/her expectation.

The goal of health care system all over the world, seeks is to attain, sustain and compete in high service quality by gaining patients' trust and satisfaction. Patient is the targeted interface between physician and pharmacist. Interaction of the patient with pharmacist plays a vital key in the quality of pharmaceutical care services. Since, it generates opinions, views and attitudes in both parties, in various situations. In addition to that, patient's impression and attitudes formed from previous and experiences represent the perception towards pharmacist' performance. Moreover, fulfilling patient' expectations and needs will be reflected in

patient's satisfaction and content with the quality of services offered. Therefore, patient's perception and satisfaction are used in this study as the indicative and determinant parameters to evaluate the quality of safe and effective pharmaceutical service offered by the pharmacist and to establish a base for future progress.<sup>1</sup>

Perception and satisfaction as have been defined by Anjay K, perception is just the way things appear, make sense and leave impression from interaction and communication in various experiences. It is perception that ensures the customer to feel served as service is the relation between service and service provider. Being in competitive market, make served is not enough for health professional and pharmaceutical company also. So, they should have to make their patients feel served. Satisfaction is a patient's general attitude toward his or her product or service received. It is habit of person of perceiving the utility of goods and service. Quality can be defined in four dimensions viz. conformance of requirement of customer, fulfilling the customer demand through company specification, getting preference over competitor followed by national and international regulatory provision.<sup>2</sup>

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This study is designed to evaluate that patient' satisfaction and perception regarding the pharmaceutical care units, which indicates the veracity of punctuality of these care units, as well as the priorities and expectations of patients, which could be considered as satisfaction and perception determinants.<sup>3</sup> Also, the straightforward talent of pharmaceutical care professionals such as the individualized behaviors in dealing with patients, together with the professional styles which are the true elements of patients' satisfaction.<sup>4</sup> Consequently, Administrations that offers more high-class pharmaceutical health care to their patients do establish prominent levels of satisfaction.<sup>5,6</sup>

## METHODOLOGY

### Site of the study

An analytical, descriptive and cross-sectional study was carried out for this research project. Random samples of 235 patients, who visited community pharmacies in different areas in Dubai, UAE, during August 2016 and February 2017, were selected.

### Questionnaire design

Questionnaire was constructed based on themes of previous studies.<sup>7,8</sup> It was divided into two subscales of a series of questions regarding the patients' perception towards pharmacist 'performance [questions from 1 to 11] and satisfaction [questions from 1 to 9] with the pharmaceutical services provided by the pharmacists in community settings.

Two versions of questionnaire were prepared English and Arabic. The English version was reviewed by the head of clinical pharmacy department to ensure appropriateness and validity of the content. Then it was translated into Arabic, also checked by another member (academic faculty in department of pharmacy practice) who is a content expert in the theme assessed in the study.

The questionnaire was based on a 5-point Likert type scale with responses ranging from strongly agrees, to strongly disagree. In addition to that, questions to obtain information on the demographics of participants. The demographic characteristic data, including gender, age, educational qualification, employment and how do they normally seek their medical information and details on number of visits to the pharmacy in the last two years.

### Data collection

This descriptive study used a questionnaire to collect data from respondents. Patients between 1- 60 were included in the study while students and professionals in medical and health related fields are excluded. A fourth-year student, 2017 [Fatma Al Alaali], was assigned for distributing questionnaire and data collection. A verbal explanation to participants about the study content and objectives followed by sign the consent form, ensuring their willingness to participate in the study. The participants required 15-20 min to complete the self-administered questionnaire, in presence of the student so that she can explain any un-understood item.

### Data analysis

Response to the questions was based on a 5-point Likert type scale with responses ranging from strongly agrees to strongly disagree. All the questionnaire statements were filled and collected. Data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 20.

All data were interpreted as percentages and calculated using the equation:  $P = (X/N) \times 100$ , where P is the final percent of a certain response to the total. X is the total responses to a certain statement and N is the total number of patients. The SPSS version was used in this study to measure

the percentage of perceived service quality and expected service quality [satisfaction].

### Ethical consideration

The study was conducted after the approval of Dubai pharmacy research ethical committee, voucher number RE23.8.16. An informed consent will be obtained by the participants prior to the distribution of survey forms. Participants were informed about the purpose and design of the study and assured that participation was voluntary and confidential. All information provided in the questionnaire by the participants will be anonymous and strict confidentiality will be maintained and will be used for research purposes only. The data generated will be kept confidential and not be shared with anybody.

## RESULTS

In this study, 235 patients participated in this survey and 25 of them did not complete the questionnaire, therefore the analysis and the outcome of my study is based on the remaining 210 participants. Therefore, the response rate in our study was around 90%.

### Demographic Characteristics of the Study Population

The Patients/respondent consists of 210 patients visited at community pharmacist. Gender distribution was by and large equal, 102 (48.5%) were male and 108 (51.4%) were female. Respondents were divided in three age groups. 62 respondents (29.5%) were of age 18 to 30 years, 88 respondents (41.9%) of them belonged to age group from 31 to 45 years. Rest of them (28.5%) was age of 46 to 60 years. The studied patient educational qualification was found sound. 158 respondents (75.2%) had done higher education. Overall, they all were found literate except 6 respondents (2.8%) who reported as illiterate. 164 respondents (78.0%) having employment under some organization, while 30 respondents (14.2%) were unemployment and 16 respondents (7.6%) was self-employed.

Regarding patients' source of medicinal information, 92 patients (43.8%) shown that the pharmacist is a prime source for seeking medicinal information which was highest among other methods. The second important source was measured as internet 40 patients (19.0%). The difference is found significant which has shown high faith of the pharmacist. Other important source for gathering medicinal information is media 36 patients (17.1%), scientific books and journals 28 patients (13.3) and last but not least from society or friends 22 patients (10.5%).

### Patients' Perception

There are a total of 210 patients, responded to the Patients' Perception based questions. Likert scale is used to gather the response the options as strongly agree, Agree, not sure, Disagree and strongly disagree. The overall responses regarding perception are depicted below in Table 1

Patients' perception who visited various community pharmacies of Dubai are considered and explored that, 158 patients (75.2%) strongly agree that pharmacist should let me know how to use my medication and warn me of any possible side effects and how to prevent it (Q.8). They also believe that pharmacists as an integral part of the health care system like physicians and nurses as their responses were 136 patients (64.7% in Q.4), none of the patient was disagreeing with this statement. Moreover, 126 patients (60.0%) are well aware that pharmacists as a mere vendor/dispenser of drugs (Q.3) besides also 116 patients (55.2%) strongly agree that pharmacist should answer my drug related questions. The faith of 170 patients (80.9%) is towards strongly agree/agreeing is that pharmacist should answer my drug related questions (Q.5). only 17.1 patients are disagree/strongly disagreeing for this perception. The perception for disagreeing about Pharmacist should check my prescriptions for accu-

racy in terms of drug name, dose, any problem in taking the medications together etc. before dispensing the medication was estimated as 0%.

However, patient perception is found disagree/strongly disagree with 59.0% that pharmacist is an expert in suggesting treatment for minor ailments (Q.2) and 60 patients (28.5%) responded as 'not sure'. The trust of 90 patients (42.8%) was found as disagree/strongly disagree on the pharmacist for the information on the use of medicines (Q.10) and 46 patients % (21.0) responded as 'not sure'. This response is also supported by Q.11 that Pharmacists should advise patients on general health issues other than drugs. The response for Q.11 is 69.5% means 146 patients were disagree/strongly disagreeing with this statement. Overall responses to all questions 1-11 is mentioned below in Figure 1.

### Average percentage of patients' perception

The average percentage responses for designed questionnaire for patients' perception estimated that 65.8% of patient are either strongly agree or agree. Only 23.2% patients were either disagree or strongly agree on the patient perception questionnaire.

### Patients' Satisfaction

Patients' satisfaction measure on various parameters as mentioned below in Table 2.

The satisfaction level of patient visited Dubai community pharmacy was approving the role of the pharmacist on their working place. 153 patients (72.8%) were strongly agreed with the simple, clear and understandable language used by the pharmacist in discussing drug related issues (Q.6). Strongly agree/agree percentage for this question were estimated 187 patients (89.0%), merely 16 patients responded as disagree/strongly disagree. 136 patients (64.7%) were strongly agree/ agree with the pharmacist counselling regarding the questions asked before dispensing medications like any history of previous drug allergy, disease details, etc. (Q.2). another approving result found for Q.5 was 134 patients (63.8%) satisfied with the kind of care and, kindness and respect in communication nevertheless 56 (26.6%) patient disagree/disagreed on the satisfaction level rest of 20 patients (9.5%) were not sure about this aspect. 106 patients

(50.4%) stated that they were satisfied with the type and amount of information discussed by the pharmacist on drug related matters (Q.1) while 66 patients (31.4%) were either disagree or strongly disagree, rest of other 38 patients were not sure about this question

The most unsatisfactory results were found in the privacy maintained by a pharmacist while discussing with patients and dispensing medications (Q.3) as 193 patients (91.9%) were either disagree or strongly disagree on this aspect. The amount of time spends by my pharmacist with each patient (Q.7) was also measured as unsatisfactory by 113 patients (53.8%) while 30 patients were not sure of time spend. Only 67 patients (31.9%) were satisfied and responded being agreed or strongly agree.

The level of knowledge that pharmacists demonstrate in drug related issues; e.g. drug-food, drug-drug interactions, storage etc. (Q.4) were also estimated as disagree/strongly disagree by 98 patients (46.6%). 112 Patients (53.3 /55.2%) were either not sure or disagree with the professional relationship that the pharmacist tries to maintain with the patients (Q.8) as mentioned below in Figure 2.

### Average % percentage patients' perception

The average % percentage response for patients' satisfaction is not as good as perception. Only 50% of patient are either strongly agree or agree. 39.6% patients were either disagree or strongly disagree on pharmacist service provided while 10.3% patents were not sure about satisfaction level.

## DISCUSSION

Generally, the society's perception to the community pharmacists as health care services professionals in charge of the utilization of pharmaceuticals in the avoidance and treatment of diseases is limited.<sup>9</sup> For this reason, the current study was conducted to explore patients' perspectives on services provided by community pharmacies in terms of patients' perception and satisfaction in Dubai. The study involved 210 patients, demographic characteristics, patients' perception to the community pharmacists' roles in health care services, patients' satisfaction to these services were evaluated.

**Table 1: Response to perception related questions.**

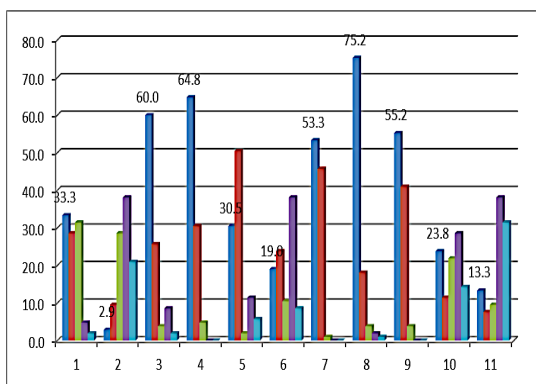
Q.	Questions	SA	A	NA	DA	SD
1	I consider the pharmacists as an expert in matters related to drugs'	70	60	66	10	4
2	The pharmacist is an expert in suggesting treatment for minor ailments	6	20	60	80	44
3	Pharmacists as a mere vendor/dispenser of drugs	126	54	8	18	4
4	Pharmacists as an integral part of the health care system like physicians and nurses	136	64	10	0	0
5	Pharmacists could provide extended services like health screening services; BP monitoring, Blood sugar monitoring mainly in the community pharmacies.	64	106	4	24	12
6	I would seek advice from the pharmacist (community pharmacist) if the condition is not serious enough to visit a physician	40	50	22	80	18
7	Pharmacist should check my prescriptions for accuracy in terms of drug name, dose, any problem in taking the medications together, etc before dispensing the medication	112	96	2	0	0
8	Pharmacist should let me know how to use my medication and warn me of any possible side effects and how to prevent it	158	38	8	4	2
9	Pharmacist should answer my drug related questions	116	86	8	0	0
10	I trust the pharmacist for the information on the use of medicines	50	24	46	60	30
11	Pharmacists should advice patients on general health issues other than drugs	28	16	20	80	66
	AVERAGE	82.3	55.8	23.0	32.3	16.3

Q- Question number, SA- Strongly agree, A- Agree, N- Not sure, D-Disagree, SD- Strongly disagree.

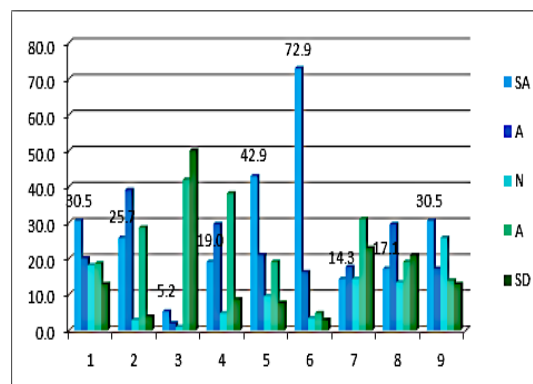
**Table 2: Response to satisfaction related questions.**

Q	Questions	SA	A	NA	DA	SD
1	I am satisfied with the type and amount of information discussed by the pharmacist on drug related matters	64	42	38	39	27
2	I am satisfied with the pharmacist counselling regarding the questions asked before dispensing medications like any history of previous drug allergy, disease details, etc.	54	82	6	60	8
3	I am satisfied with the privacy maintained by pharmacist while discussing with patients and dispensing medications	11	4	2	88	105
4	I am satisfied with the level of knowledge that pharmacists demonstrate in drug related issues e.g. drug-food, drug-drug interactions, storage etc.	40	62	10	80	18
5	I am satisfied with the kind of care and, kindness and respect in communication.	90	44	20	40	16
6	I am satisfied with the simple, clear and understandable language used by the pharmacist in discussing drug related issues.	153	34	7	10	6
7	I am satisfied by the amount of time spend by my pharmacist with each patient	30	37	30	65	48
8	I am satisfied with the professional relationship that the pharmacist tries to maintain with the patients	36	62	28	40	44
9	I am satisfied with the kind of information the pharmacist provides on disease and other health issues during the course of treatment	64	36	54	29	27
AVERAGE		60.2	44.7	21.6	50.1	33.2

Q- Question number, SA- Strongly agree, A- Agree, N- Not sure, D-Disagree, SD- Strongly disagree.



**Figure 1:** Response to perception related questions.



**Figure 2:** Response to satisfaction related questions.

### Demographic Characteristics of the Study Population

The finding regarding to the patients' source for the medicinal information indicated that near to fifth percent of the respondents exactly (43.8%) turn to community pharmacists to get information related to medicine. This suggests a good communication between the patients and community pharmacists. This study is in line with the study performed in Iraq.<sup>10</sup> The rest of the percentages for the information sources were distributed to the internet, media, scientific books and society or friends respectively. The percentage of getting advice from society and friends is almost comparable to a study conducted in Europe where around 8% participating patients seek advice from friends and family.<sup>11</sup>

### Perception

Regarding the pharmacist actual role as being an expert in matters related to suggesting treatment for minor health issues, being not only a dispenser for drugs, an integral part of the health care system as physicians and explaining to the telling patients how to use their medications

as pharmacotherapeutic role, including answering questions related to drug, those statements got 63%, 55%, 35% and 54% as percentages scores. These percentages were of high positive responses. These positive responses above ensure the professional counselling of pharmacists to patients at the time of dispensing their prescriptions, as well as the good drug information's delivered to patients and public. These results comply with the study conducted in Saudi Arabia.<sup>12</sup>

These findings were also supported by a study done on Omani population, the study found good public perception on the role of pharmacists regarding their expertise and professionalism.<sup>13</sup>

While responses about seeking advice from pharmacists if the condition is not serious enough to see a physician, trusting pharmacists for information on the use of medication, the percentages of these responses were highest as a disagreement response. The percentages were 38.0%, 28.5%, These responses ensure that pharmacists should contact each patient individually to determine the level of interaction that allows him / her to



give advices in subjects other than drugs so that to prevent patients from having low a perception regarding them.<sup>14</sup>

### Satisfaction

Patients satisfaction about type, kind and amount of information a patient gets by the pharmacist, pharmacists' counselling profile, pharmacists' kindness and respect during communication, the simple language used and the professional relationship, these responses were highly positive, the percentages were 30.4%, 39.0%, 42.8% and 72.8%. These results show the high level of positive satisfaction parameters, which complies with other studies that supported these points as important features in the prediction of patients' good satisfaction.<sup>15</sup> Another study showed high percentages scores with the service of pharmacists and their pharmaceutical knowledge aspects regarding diabetes, in which patients were satisfied with the pharmaceutical care profile and clinical outcomes of their treatment and follow up of their diabetes medications.<sup>16</sup>

For the privacy, pharmacists' level of knowledge and amount of time spent with the patients; these statements had an alarmingly high score of disagreements. It was found that the appropriateness of therapy, including drug information and drug interactions usually required additional time to be consumed between the patient and the pharmacist. Therefore, the pharmacists' quality of information and communication in drug supply depends on the time provided by them for each patient, as it was found that there is a relationship between the pharmacists' time provided and the level of patients' satisfaction. This study can bring about an explanation to make us think why we got such high negative satisfaction results in these particular issues and try to concentrate on them to be solved. The pharmacists have several functions to be accomplished in order to fulfill patients' satisfaction and perception, but unfortunately, in many countries, the ratios of pharmacies and pharmacists to the population are low, in these cases consultations and communications with pharmacists are going to be affected.<sup>17</sup>

An important point to be mentioned is about the patients' level of education. It was noticed that 75% of the patients were highly educated, this information is very important as it assures that the responses obtained from the questionnaire were satisfactory regarding the impression of the data collected, as it was found that there is a connection between education and health, which means it plays a critical role in the determination and perception about health issues.<sup>18</sup>

patients were highly satisfied with the professional pharmacists' counselling profile (39.0%), the simple, understandable language used by the pharmacists (72.8%), care, kindness and respect provided by pharmacists' communication and attitude (42.8%), the pharmacist is not only a drug dispenser (55%) the pharmacist is a professional therapist who tells patients how to use their medications (75.2%) and in answering any drug-related questions asked by patients (55.2%). On the other hand, patients were not satisfied with privacy issues and the time spent by the pharmacist with each patient and also patients had a low perception towards the pharmacists giving advice about health issues other than drugs.

### Limitation of the Study

The results of this study cannot be generalized to all patients in Dubai. The views may be different among other community pharmacies in different areas, size, work load of the pharmacist, trained skilled technician and working hours and other environmental factors in pharmacy settings where the experiences and contacts with pharmacists may be different. Moreover, the limited numbers of the participants were considered in study. Furthermore, the study only patients have been investigated, hence, a future study investigating community pharmacists' attitudes and experiences will provide a more comprehensive view. Moreover, if some closed ended questions in the questionnaire are replaced with open-ended, it may aid clarify expectations and avoid experimental problems.

## CONCLUSION

This survey demonstrates that patients contemplated pharmacists as a trustworthy source of drug information and as successful therapists with decent communication care strategies were positively encountered. However, patients' expectations and perceptions towards the roles of pharmacists did not match their real knowledge, capabilities and skills. They were interested in developing pharmacists' roles to expand his/her scope of practice to tackle more activities in the community settings. Nevertheless, there are some areas need attention and efforts such as the amount of time spent with each patient, long hours management, critical skills and general health issues advice, especially in heavy working pharmacies, Therefore, efforts to emphasize pharmacists' role as health premotor help to attain safe and effective pharmaceutical care service and to meet our prospects.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## ABBREVIATIONS

Q: Question number; SA: Strongly agree; A: Agree; N: Not sure; D: Disagree; SD: Strongly disagree.

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