

## Patient's General Perception and Attitude toward Pharmacists in Saudi Arabia

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### Abstract

**Purpose:** To explore the patient's perception and attitude toward pharmacists in Saudi Arabia. **Methods:** This is a 4-month cross-sectional survey of patient perception of pharmacists. The survey consisted of two parts: the first part gathers demographic information and the second part has 49 questions divided into four domains: (1) the first domain captures patient's general perception of the pharmacist; (2) the second domain is regarding patient's perception of pharmaceutical care services; (3) the third domain is about patient perception of visiting ambulatory care; and (4) the fourth domain is regarding patient's perception of pharmacist's relationship and counseling skills. We used the 5-point Likert response scale system to obtain responses of the participants. There were open- and close-ended questions. The survey was distributed through social media to a 500-bed general hospital in Alhasa region, an ambulatory care pharmacy. The authors interviewed the patients with an electronic survey documentation. The survey analyzed domain one, which is the primary or necessary general perceptions about pharmacists and the data were analyzed through the Survey Monkey system. **Results:** A total of 617 patients responded to the survey. Of them, 536 (87.7%) were Saudi and 75 (12.3%) were non-Saudi nationals. There were 457 (74.1%) female and 160 (25.9%) male responders. In the past 12 months, most patients (222 (36.04%)) visited the pharmacy more than 10 times, followed by 122 (19.81%) visited the pharmacy at least 5–9 times. Most of the patients (481 (83.5%)) spent less than 11 min with the pharmacist. The statements with highest scores were related to the pharmacist's perceptions such as pharmacy job is vital in our society (4.63); the pharmacist has a very significant role in preventing medications errors (4.4); the necessity of present pharmacist schools (4.09); and the pharmacist is the first person ask about drugs (4.01). More than 60% of the responders chose pharmacy as the professional specialty or suggest their family members or friend to select a professional pharmacy. The majority of pharmacists shared information in public education through the television and media (3.7) and newspaper (3.65) followed by schools (3.56) and public education exhibitors (3.48). Most of the patients (429 (73.1%)) visited the pharmacist to seek help, and due to the pharmacists knew more about medication doses and their adverse effects (224 (38.16%)), and free consultation 166 (28.28%) **Conclusion:** Majority of the patients had a good perception about the pharmacist and his role with patients and the public. The pharmacists should expand their services across all healthcare institutions in Saudi Arabia.

**Key words:** Patient, Perception, Attitude, Pharmacist, Saudi Arabia.

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## INTRODUCTION

Since the past few years, the pharmacists have been playing a potential role in providing pharmaceutical care to the patients.<sup>1-3</sup> The pharmacist prevents drug-related problems through providing interventions and share them with the medical teams involved in patients care.<sup>4-6</sup> However, the studies did not involve the patient's perspectives and their attitudes toward the pharmacist or pharmacy professionals. Several studies have investigated the patient perception of a pharmacist overall the world.<sup>7-10</sup> Some studies have investigated the general perception of a pharmacist, whereas the others have discussed the perception of the pharmacist's duties or pharmacy services at each organization. Some studies have shown that the pharmacist's attitudes are perceived by the patient as good, whereas the others provide contradictory results. Till date, studies regarding the patient's perception of a pharmacist's attitudes are scarce in a large and significant number of patients.<sup>3,7-11</sup> There are a few studies regarding the patient's perception toward the pharmacist in Saudi Arabia or countries in the Middle East<sup>3,10</sup>. Therefore, in this study, we aimed to explore the general perception of a patient regarding the pharmacist in the Kingdom of Saudi Arabia.

## METHODS

This is a 4-month cross-sectional survey of patient perception of pharmacists. The survey consisted of two parts: the first part captures demographic information and the second part is a questionnaire with 49 questions divided into four domains. (1) The first domain is regarding patient's general perception of a pharmacist; (2) the second domain captures patient's perception of pharmaceutical care services; (3) the third domain is regarding patient's perception of visiting ambulatory care; and (4) the fourth domain captures patient's perception of pharmacist's relationship and counseling skills. We used 5-point Likert response scale system to obtain responses of the patients. There were open- and close-ended questions. The survey was distributed through social media to a 500-bed general hospital in Alhasa region, an ambulatory care pharmacy. The hospital is accredited to the Central Board for Accreditation of Healthcare Institutions (CBAHI) in Saudi Arabia and to the Joint Commission of Hospital Accreditation in the United States of America (USA).<sup>12-13</sup> The hospital has several departments including the internal medicine, surgery, pediatrics, obstetrics and gynecology, with a separate nursing unit in addition to

the medical and surgical ambulatory care clinics. The department of pharmacy distributes the medication through unit dose system according to CBAHI standards and American Society of Health-System standards. Furthermore, the pharmacy has inpatient pharmacy, outpatient pharmacy, and intravenous admixture services with professional total parenteral nutrition. The clinical pharmacy services cover critical care units, internal medicine, drug information center, patient-counseling services, and medication safety program. The authors interviewed the patients with electronic survey documentation. The survey was distributed in an electronic format and it analyzed domain one the general perception of a patient regarding the pharmacist through survey monkey system

## RESULTS

A total of 617 patients responded to the survey. Of them, 536 (87.7%) were Saudi and 75 (12.3%) were non-Saudi nationals. There were 457 (74.1%) female and 160 (25.9%) male responders. Most of them were in the age group of 18–44 years (84.1%) and were located at Alhasa Region (255 (41.7%)), Riyadh Region (150 (24.55%)), and East Province region (144 (23.56%)). The highest level of education of the responders was Bachelor's degree (395 (64.4%)) followed by high school level (95 (15.5%)). Most patients visited the pharmacy in the past 12 months (222 (36%)), whereas 122 (19.8%) patients visited pharmacy at least 5–9 times. Most of the patients (192 81.70%) was their follow-up visit, whereas the others' (43 (18.30%)) was their first visit. Most of the patients (395 (64.6%)) visited the pharmacy at evening. Most of the patients (481 (83.5%)) spent less than 11 min with the pharmacist (Table 1). Statements such as pharmacy job is vital in our society (4.63), the pharmacist has a very significant role in preventing errors in medications (4.4), the necessity of present pharmacist schools (4.09), and the pharmacist is the first person to ask him about drugs (4.01) showed highest scores than that of statements such as the pharmacist participates in patient's therapeutic plan with the medical team (3.89), calling the pharmacist by the doctor (3.81), and the pharmacist has a very high social level (3.71). More than 60% of the responders chose pharmacy as the professional specialty or suggest the family members or friends to select a professional pharmacy (Table 2). The pharmacists shared information through the television and media (3.7) and newspaper (3.65) followed by schools (3.56) and public education exhibitors (3.48) (Table 3). Most of the patients (429 (73.1%)) visited the pharmacist to

**Table 1: Demographic responder qualifications information.**

	Response Count	Response Percent
<b>Sex</b>		
Female	457	74.07%
Male	160	25.93%
Answered question	617	
Skipped question	0	
<b>Nationality</b>		
Saudi	536	87.73%
Non-Saudi	75	12.27%
Answered question	611	
Skipped question	6	
<b>Age</b>		
<18	35	5.69%
18 - 29	277	45.04%
30 - 44	240	39.02%
45 - 59	60	9.76%
60+	3	0.49%
Answered question	615	
Skipped question	2	
<b>Type of visit</b>		
First visit	43	18.30%
Follow up	192	81.70%
Answered question	235	
Skipped question	2	
<b>In the last 12 months, the number of times visited the pharmacy</b>		
None	23	3.73%
1 time	40	6.49%
2	60	9.74%
3	56	9.09%
4	93	15.10%
5 to 9	122	19.81%
10 or more times	222	36.04%
Answered question	616	
Skipped question	1	
<b>Time of Visiting the Pharmacy</b>		
Morning	116	18.99%
Evening	395	64.65%
Night	100	16.37%
Answered question	611	
Skipped question	6	
<b>The waiting time to get the medications</b>		
< 5	293	50.87%
5-10	188	32.64%
11-15	53	9.20%
16-20	17	2.95%
21-25	4	0.69%

26-30	10	1.74%
31-35	1	0.17%
36-40	2	0.35%
41-45	3	0.52%
46-50	0	0.00%
51-55	1	0.17%
56-60	1	0.17%
More than 60	3	0.52%
Answered question	576	
Skipped question	41	
<b>Educational levels</b>	<b>Response Count</b>	<b>Response Percent</b>
Doctorate degree	10	1.63%
Master degree	32	5.22%
Bachelor Degree	395	64.44%
Diploma	46	7.50%
High school	95	15.50%
Intermediate School	29	4.73%
Primary School	5	0.82%
Not educated	1	0.16%
Answered question	613	
Skipped question	4	

**Table 2: General ideas about the pharmacist.**

No	Answer Options	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Rating Average	Response Count
1	I am calling the pharmacist to the doctor	179	245	103	59	24	3.81	610
2	The pharmacist for dispensing medication only	82	187	86	199	58	3.06	612
3	The pharmacy job is vital in our society	417	166	19	5	2	4.63	609
4	the pharmacist has a very high social level	129	239	181	54	6	3.71	609
5	the necessity of present pharmacist schools	278	180	91	50	10	4.09	609
6	the pharmacist had the very significant role in preventing medications errors	344	201	40	23	5	4.40	613
7	pharmacist participates in patient therapeutic plan part of the medical team	200	226	108	62	12	3.89	608
8	I know the clinical pharmacist and his role for the patients	121	210	183	57	25	3.58	596
9	The pharmacist is the first person ask him about drugs	233	239	58	57	18	4.01	605
10	The community pharmacist for cosmetics only	25	60	114	285	119	2.32	603
11	I will choose pharmacy as my professional specialty if there is a chance for that	83	163	161	128	71	3.10	606
12	I will suggest my family members and friend choose pharmacy professional for his life	84	193	210	77	39	3.34	603
	<b>answered question</b>							<b>616</b>
	<b>skipped question</b>							<b>1</b>

**Table 3: Pharmacist shares in public education through media.**

No	Answer Options	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Rating Average	Response Count
1	The pharmacist participates in public education in the schools	132	214	134	80	32	3.56	592
2	The pharmacist participates in medication public education through the televisions and media	150	233	113	74	23	3.70	593
3	The pharmacist participates in medication public education through the newspapers and magazines	136	224	134	77	19	3.65	590
4	The pharmacist participates in medication public education exhibitions	114	181	185	79	26	3.48	585
<b>answered question</b>								<b>594</b>
<b>skipped question</b>								<b>23</b>

**Table 4: The reasons for patient ask the pharmacist before the physician.**

Answer Options	Response Count	Response Percent
To seek help in health diseases	429	73.08%
No need for appointment for pharmacy visits	161	27.43%
Fee consultation	166	28.28%
The pharmacist knows more about drug doses and adverse drug reaction	224	38.16%
I prefer the pharmacist consultations	85	14.48%
Very easy to reach pharmacy	7	1.19%
Other (please specify)	11	1.87%
<b>answered question</b>	<b>587</b>	
<b>skipped question</b>	<b>30</b>	

seek help regarding their disease. The pharmacists knew more about medication doses and adverse effects (224 (38.16%)), followed reasons by free consultation and 166 (28.28%) and no need for an appointment for pharmacy visit. In addition, most of the patients did not utilize the pharmacy just for cosmetics (404 (67%)) (Table 4).

## DISCUSSION

Over the past several years, the general administration of pharmaceutical care at the Ministry of Health has provided several pharmaceutical services to different types of patients.<sup>14</sup> They established the strategic plan for pharmacy during 2004–2010 and then they updated it for a period of 2010–2020.<sup>15</sup> Furthermore, several key performance indicators were founded to measure the improvement of the pharmacy services, including the pharmacy programs, pharmacy administration, human resources, and patient indicators.<sup>14,16–20</sup> The critical indicators were used to estimate patient satisfaction of pharmacy services at hospitals and primary healthcare centers. However, the patient point of views were not included the patient perceptive of pharmacist and not

explored the patient's view with bad or good attitudes toward pharmacists. Therefore, in this study, we aimed to explore the general perception of the patient toward the pharmacist. According to our results, the patients visited and met the pharmacist several times in the past 12 months, and most of the patients had come for a follow-up visit and not the first time. The results on the patients' number of visits to the pharmacy is similar to those reported by Jose *et al.*, Khan *et al.*, and Merks *et al.*<sup>10,21–22</sup> This shows that patients have good experience in contacting the pharmacists and they can expressed his general perception toward the pharmacist. The average time contacting the pharmacist was 11 min which is enough to discuss with the pharmacist. Most of the patients had good general perception regarding the pharmacist as their job reflects the job of a medical doctor. The patient perceives that the pharmacist knows to prevent medication errors; this finding agrees with those reported by Jose *et al.*<sup>10</sup> The patient ask the first person about the medications was the pharmacist with good percentages because the patient trust of pharmacist background information knowledge. Most of the patients trusted the pharmacists' involvement

in the therapeutic plan during patient management. This finding was not in agreement with those reported by Jose *et al.*, whereas it agrees with those reported by Khan *et al.*<sup>10,21</sup> That's related the study question little bit different what reported by Jose *et al.* the role of pharmacist not applied cautiously all the times with drug therapy especially in the community pharmacy. However, some patients thought that the pharmacist is there only for dispensing medications; this has also been reported by Jose *et al.* and Khan *et al.*<sup>10,21</sup> The patient perceive pharmacy professionals as specialists in our society and treat them similar to doctors and the responders choose the pharmacy professionals with advice the family the pharmacy as working professional job. According to the patients, most of the pharmacists share information through television, social media, and newspaper. This is the main reason why the patients follow the programs hosted by a pharmacist or read the topics written by the pharmacist. The reason for most of the patients to visit the pharmacy prior to the physician is due to the fact that pharmacists help the patients with regard to their disease. The patients formed an opinion that pharmacies has the better knowledge of medications and their adverse effects than that of other healthcare professionals. These results agree with those reported by Oshima *et al.*<sup>11</sup> and Khan *et al.*<sup>13</sup> Maybe the pharmacist role was not implemented in that country very well. In addition, the patients were found to visit the pharmacy for medical consultation and not just to buy cosmetics. This reflects a good perception of a patient toward pharmacist. Thus, the authors of this study suggest that expanding pharmaceutical services with the greater involvement of pharmacist with the medical team is very useful in treating patients. The greatest problem with respect to patients is medications counseling, medications adherence, and medications reconciliation. **CONCLUSION** The patients showed a good perception of the pharmacy services in the Saudi society. The pharmacy services should be expanded with much involvement of a pharmacist in the therapeutic plan.

## CONCLUSION

The patients showed a good perception of the pharmacy services in the Saudi society. The pharmacy services should be expanded with much involvement of a pharmacist in the therapeutic plan.

## ACKNOWLEDGMENT

None.

## CONFLICT OF INTEREST

None.

## ABBREVIATIONS

**KSA:** Kingdom of Saudi Arabia; **MOH:** Ministry of Health, **CBAHI:** Saudi Central Board for Accreditation of Healthcare Institutions, **USA:** United States of America.

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