

# 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:** It is a 4-month cross-sectional survey of patient perception of pharmacists. The survey consisted of 49 questions divided in two parts: the first part collects demographic information and the second part contains questions on 4 domains: (1) patient general perception of pharmacist, (2) patients perception of pharmaceutical care services, (3) patient perception of visiting ambulatory care, (4) patient's perception of pharmacist's relationship and counseling. The 5-point Likert response scale system was used. The questions were open and closed-ended. The survey was distributed through social media at a 500-bed general hospital in Alhasa region, an ambulatory care pharmacy. The authors interviewed the patients with an electronic survey documentation. The survey was in an electronic format and it analyze domain one primary or necessary information about patient medication 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 of the patients [222 (36%)] visited the pharmacy more than 10 times, whereas the others [122 (19.8%)] visited the pharmacy at least 5–9 times. Most of the patients 481 (83.5%) spent less than 11 min with the pharmacist. The highest score was obtained for the statements related to pharmacy job vital in our society (4.63), the pharmacist had a very significant role in preventing medication errors (4.4), the necessity of present pharmacist schools (4.09) and the pharmacist is the first person ask him about drugs (4.01). More 60% of responders will choose the pharmacy as professional specialty or suggest the family members or friend select the pharmacy professional. The pharmacist shared 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 visited the pharmacist to seek help in health diseases 429 (73.1%), the pharmacist knows more about drug doses and adverse drug reaction 224 (38.16%), followed by free consultation and 166 (28.28%) and no need for an appointment for pharmacy visit. Also, the patient refused to utilize the pharmacy just for cosmetics 404 (67%).

**Conclusion:** According to our results, patient's perception during pharmacy visit was found to be acceptable. Majority of patients had a good perception of a pharmacist and his role with patients and the general public. The pharmacist should expand pharmaceutical care services overall healthcare institutions in Saudi Arabia.

**Keywords:** Patient, Perception, Attitude Pharmacists, Saudi Arabia.

## INTRODUCTION

The patient visits an ambulatory care clinic in search for medical care. Several healthcare professionals deliver the services to the patient to progress the clinical outcome of the patient during treatment or prevention of the disease. Each service had different tools with different levels of healthcare services.<sup>[1-3]</sup> Over past years, the pharmacist had the potential role in providing pharmaceutical care to the patients.<sup>[1-3]</sup> The pharmacist prevents drug-related problems, through their interventions and shared in with medical teams.<sup>[4-6]</sup> All those studies without the involvement of patient's perspectives and their attitudes toward the pharmacist or pharmacy professionals. Several studies investigated the patient perception of pharmacist over all the world.<sup>[7-10]</sup> Some studies investigated the general perception of the pharmacist's personal and others discussed the perception of pharmacist duties or pharmacy services at each organization. Some

studies showed well and some shoes bad attitudes. The patient perception or attitudes are not well known in a large and significant number of patients. It seldom to find the study about patient perception toward the pharmacist in Saudi Arabia or counties and the Middle East. The objective of the study was to explore the general patient perception of pharmacist in the Kingdom of Saudi Arabia.

## METHODS

It is a 4-month cross-sectional survey of patient perception of pharmacists. The survey consisted of 49 questions divided in two parts: the first part collects demographic information and the second part contains questions on 4 domains: (1) patient general perception of pharmacist, (2) patients perception of pharmaceutical care services, (3) patient perception of visit-

ing ambulatory care, (4) patient's perception of pharmacist's relationship and counseling. The 5-point Likert response scale system was used. The questions were open and closed-ended. The survey was distributed through social media at a 500-bed general hospital in Alhassa region, an ambulatory care pharmacy. The hospital is accredited by Saudi Center for Healthcare Organization (CBAHI) and Joint Commission on Hospital Accreditation from the United States of America (USA).<sup>[11,12]</sup> The hospital has several departments including the adults internal medicine, adult surgery, pediatrics, obstetrics and gynecology. It had adults, pediatrics and neonatal critical care, with the separated nursing unit, in addition to medical and surgical ambulatory care clinics. The pharmacy departments distribute the medication through unit dose system according to CBAHI standards and American Society of Health-System standards. Furthermore, the pharmacy had inpatient pharmacy, outpatient pharmacy, and intravenous admixture services with professional Total Parenteral Nutrition (TPN). The clinical pharmacy services covered critical care units, internal medicine, drug information center, patient-counseling services and medication safety program. The authors interviewed the patients with an electronic survey documentation. The survey was in an electronic format and it analyze domain one primary or necessary information about patient medication 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. The majority of them were in age group 18-44 years (84.1%) and located at Alhasa Region 255 (41.7%), Riyadh Region 150 (24.55%) and East Province region 144 (23.56%). The most educational level of the responders were bachelor degree 395 (64.4%) followed by high school level 95 (15.5%). In the past 12 months, most of the patients [222 (36%)] visited the pharmacy more than 10 times, whereas the others [122 (19.8%)] visited the pharmacy at least 5-9 times. Most of the patients had the follow-up visits 192 (81.70%), while 43 (18.30%) was the first visit. Most of the patient visited the pharmacy at evening time 395 (64.6%). Most of the patients 481 (83.5%) spent less than 11 min with the pharmacist (Table 1). The highest score was obtained for the statements related to pharmacy job vital in our society (4.63), the pharmacist had a very significant role in preventing medication errors (4.4), the necessity of pres-

**Table1: Demographic responder qualifications information**

	Response Count	Response Percent
Sex		
Female	457	74.07%
Male	160	25.93%
Answered question	617	
Skipped question	0	
Nationality		
Saudi	536	87.73%
Non-Saudi	75	12.27%
Answered question	611	
Skipped question	6	
Age		
<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	
Qualification of the responders	Response Count	Response Percent
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	
Type of visit	Response Count	Response Percent
First visit	43	18.30%
Follow up	192	81.70%
Answered question	235	
Skipped question	2	
In the last 12 months, the number of times visited the pharmacy	Response Count	Response Percent
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	
Time of Visiting the Pharmacy	Response Count	Response Percent
Morning	116	18.99%
Evening	395	64.65%
Night	100	16.37%
Answered question	611	
Skipped question	6	
The waiting time to get the medications	Response Count	Response Percent
< 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	

ent pharmacist schools (4.09) and the pharmacist is the first person ask him about drugs (4.01) followed by the pharmacist participates in patient therapeutic plan part of 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 60% of responders will choose the pharmacy as professional specialty or suggest the family members or friend select the pharmacy professional (Table 2). The pharmacist shared 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) (Table 3). Most of the patients visited the pharmacist to seek help in health diseases 429 (73.1%), the pharmacist knows more about drug doses and adverse drug reaction 224 (38.16%, followed by free consultation and 166 (28.28%) and no need for an appointment for pharmacy visit. Also, the patient refused to utilize the pharmacy just for cosmetics 404 (67%) (Table 4).

## DISCUSSION

The pharmacy administration in Ministry of Health in the Kingdom of Saudi Arabia estab-

**Table2: 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 <sup>1</sup>	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>

**Table3: 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
answered question								594
skipped question								23

lished the updated pharmaceutical care strategic plan.

Over the past several years, the general administration of pharmaceutical care at the Ministry of Health provided several pharmaceutical services to all different types of patient.<sup>[13]</sup> They established the pharmacy strategic planning for the period 2004 to 2010 then updated for the period 2010-2020 or with new vision 2030.<sup>[14,15]</sup> Also, several key performance indicators founded to measure the improvement of the pharmacy services. That has included the pharmacy program indicators, pharmacy administration indicators, human resources indicators and patient indicators.<sup>[13,16-19]</sup>

The critical indicators used the patient satisfaction of pharmacy services in hospitals and primary healthcare centers. However, the patient point views not completed as patient perceptive if the pharmacist and what is the patient need from the pharmacist, do the patients had any bad or good attitudes of pharmacists. The investigator tried to explore the general perception of the patient toward the pharmacist. The finding showed the patients visited and meet the pharmacist, several times in the past twelve months and the most patients follow up not the first time. The results of a number of visiting pharmacy resemble what reported by Jose J *et al.* Khan MU *et al.* and Merks P *et al.*<sup>[10,20-21]</sup>

That is main the patients had good experiences contact with patients and they can stated his general perception toward the pharmacist. The average time contacting the pharmacist was eleven minutes, which enough time to discuss with the pharmacist and perception feedback. Most of the patient had a good general perception of the pharmacist with vital pharmacy jobs in the society due to reflection the pharmacist job looks like medical doctors. The patient had good perception that is the pharmacist preventing medication errors, which was a good role of pharmacist in the practice and that's resemble what reported by Jose J *et al.*<sup>[10]</sup> The patient ask the first one about the medications

**Table4: 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%
answered question	587	
skipped question	30	

was the pharmacist with good percentages due the patient trust of pharmacist background information knowledge. Most of the patient trusted on the pharmacists involved in the therapeutic plan during patient management and its lower what reported by Jose J *et al.* and resemble what reported by Khan MU *et al.*<sup>[10,20]</sup> That's related the study question little bit different what reported by Jose J *et al.* the role of pharmacist not involved all the times with drug therapy especially in the community pharmacy. In addition, some patient still considered the pharmacist only for dispensing medications and that's resemble what reported by Jose J *et al.* and Khan MU *et al.*<sup>[10,20]</sup> The patient had a good image of the pharmacy professional's specialty in our society and calling them as doctors and choose the pharmacy professionals and advise their family get enter this specialty. The patient stated the most pharmacists shared in the television and social medical and newspaper as public education. That is main the patient follow-up the program operated by a pharmacist or reading the topics wrote by the pharmacist. The patient explored the most reason of visiting pharmacy before physician due to the pharmacist help the patient in health diseases and the patients relied that's pharmacies had better knowledge of medications and adverse drug reaction than others health care professionals. The results of medication knowledge of pharmacist better than physician resemble what reported by Khan MU *et al.*<sup>[20]</sup> and better than what reported by Oshima S

*et al.*<sup>[7]</sup> Maybe the pharmacist role not developed in that country very well. In addition, the pharmacist visited the pharmacy for medical consultation and refuse to consider the pharmacist as cosmetic seller. That's reflected the knowledge of patient and good perception of pharmacist in the practice. Most of the results could not compare with other studies because not reported yet. With the perfect perception of the patient toward the pharmacist, the authors suggested to the pharmacist to expand the pharmacy services and more involvement of pharmacist with medical team and therapeutic medication of all patients. The most problems demand with the patient is patient medication counseling, medication adherence services and medication reconciliation.

## CONCLUSION

The patient's perception of a pharmacist during pharmacy visit was found to be neutral despite some factors being missed related to drug therapy monitoring. Targeting to expand the medication non-adherence and resolution are highly suggested to improve patient's perception of pharmacist during pharmacy visit in the Kingdom of Saudi Arabia.

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None.

## CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

## ABBREVIATIONS

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

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