

## Patient's Perception and Attitude of Pharmacist during Pharmacy Visits in Saudi Arabia

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### Abstract

**Purpose:** To explore patient's perception and attitude during pharmacy visit in Saudi Arabia. **Methods:** This is a 4-month cross-sectional survey of patient perception regarding 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 the pharmacist; (2) the second domain captures data of patient's perception regarding pharmaceutical care services; (3) the third domain is regarding patient's perception of visiting ambulatory care; and (4) the fourth domain captures information on patient's perception regarding the 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 Alhassa region, an ambulatory care pharmacy. The authors interviewed the patients with an electronic survey documentation. The survey analyzed domain three, which is about the patient's perception of visiting ambulatory care 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. 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 average score of patients' general perception of the pharmacist during pharmacy visit was 3.74. The highest score was obtained for the statements received all medications prescribed to me (4.16) and pharmacy convenient located (4.0).<sup>4</sup> The lowest score was obtained for the statement pharmacy waiting area convenient located (3.38). The average score of patient perception of the pharmacist with drug monitoring during the pharmacy visit was 3.74. The highest score was obtained for the statement—the patient revived a copy of prescription-contained medications (3.4), whereas the lowest score was obtained for the statement—the pharmacist gives a follow-up call to the patient as medications prescribed (2.09). The score for general evaluation of pharmacy visit was found to be 3.67 with a score of (3.55) for the preference to visit the pharmacy or recommendation to other patients or friends. **Conclusion:** According to our results, patient's perception during pharmacy visit was found to be acceptable. Pharmacy communication methods and counseling place missed. Corrections of patient needs will improve patient's perceptions and raise patient satisfaction during visiting of pharmacy.

**Key words:** Patient, Perception, Attitude, Visit, Ministry of Health, Saudi Arabia.

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## INTRODUCTION

The patient visits an ambulatory care clinic in search for medical care. Several healthcare professionals provide the services to the patient to improve the clinical outcome of the patient during treatment or prevention of the disease. Each service had different tools with different levels of healthcare services. One of the tools of measurements is to measure the satisfaction of services provided by healthcare professionals including physicians, nurses, and pharmacists.<sup>1</sup> A previous study has been published regarding the satisfaction of pharmacy services.<sup>2</sup> There is another tool of measurement called perception of the patient while providing the services. There are several studies that have discussed on the patients' perception of the pharmacist and their attitude during their visit to the ambulatory care pharmacy or community pharmacy.<sup>3-5</sup> However, to the best of our knowledge, the studies regarding the patient perception of a pharmacist during receiving ambulatory care services are scarce worldwide.<sup>6</sup> Therefore, in this study, we aimed to explore the patient's perception of a pharmacist during receiving ambulatory care service in Kingdom of Saudi Arabia.

## METHODS

This is a 4-month cross-sectional survey of patient perception regarding 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 captures data on 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 related to the patient's perception of visiting ambulatory care; and (4) the fourth domain is related to the patient's perception of pharmacist's relationship and counseling skills. We used the 5-point Likert response scale system to obtain responses of patients. There were open- and close-ended questions. The survey was distributed through social media at a 500-bed general hospital in Alhassa 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 on Hospital Accreditation in the United States of America (USA).<sup>7-8</sup> The hospital has several departments including the adults' internal medicine, adults' surgery, pediatrics, obstetrics and gynecology. It had adults, pediatrics, and neonatal critical care units

with a separate nursing unit, in addition to the 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, 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 programs. The authors interviewed the patients with an electronic survey documentation. The survey analyzed domain one, which is patient's perception of a pharmacist during receiving ambulatory care service in Kingdom of Saudi Arabia.

## 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%)). 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 visited due to their follow-up visit (192 (81.70%)), whereas for other (43 (18.30%)), this 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). The average score of patient's general perception of a pharmacist during pharmacy visit was found to be 3.74. The statements such as received all medications prescribed to me (4.16) and pharmacy is conveniently located (4.0) obtained the highest scores.<sup>4</sup> The statement that obtained lowest score was pharmacy's waiting area is conveniently located (3.38). The average score of patient's perception of the pharmacist with drug monitoring during their pharmacy visit was found to be 3.74; the statement with highest score was—the patient revived a copy of prescription-contained medications (3.4), whereas the statement with the lowest score was—the pharmacist gives follow-up call to the patients as medications prescribed (2.09). The score on general evaluation of pharmacy visit was 3.67 with a preference to visit the pharmacy or recommend it to the other patients or

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

	<b>Response Count</b>	<b>Response Percent</b>
<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>	<b>Response Count</b>	<b>Response Percent</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>	<b>Response Count</b>	<b>Response Percent</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>	<b>Response Count</b>	<b>Response Percent</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>	<b>Response Count</b>	<b>Response Percent</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 years or equal	3	0.52%
Answered question	576	
Skipped question	41	
Educational levels	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	

**Table 2: The General Patients Perception toward the pharmacist during his visiting during his visiting.**

Answer Options	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Rating Average	Response Count
1. Pharmacy Location Domain Is the pharmacy conveniently located	163	278	84	21	13	4.00	559
2. Pharmacy Waiting Area Domain Is the waiting area of pharmacy conveniently located?	84	212	137	82	43	3.38	558
3. Pharmacy Waiting Time Domain The amount of time it takes to get a prescription filled at your pharmacy is very appropriate.	107	283	110	44	15	3.76	559
4. Medication Availability Domain Have you received all the medications, that has prescribed to you	216	275	64	21	6	4.16	582
5. You have received a prescription refill of your medicines to continue dispensing from pharmacy directly next months.	89	200	173	74	37	3.40	573
<b>answered question</b>							<b>565</b>
<b>skipped question</b>							<b>52</b>

**Table 3: General Patient attitudes toward the pharmacist with drug monitoring during his visiting.**

Answer Options	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Rating Average	Response Count
1. Medication Reconciliation Domain Pharmacist uses information about you previous conditions/drugs when assessing your drug therapy.	82	129	139	150	65	3.02	565
2. You have received a copy of prescription contains all medications prescribed to you, and may use during outpatient clinic or emergency when necessary.	82	206	141	83	34	3.40	546
3. Medication Adherence Domain The pharmacist asks about medication compliance	53	109	156	162	80	2.81	560
4. The pharmacist follow up you and call you after taking your medications as prescribed	29	41	110	153	227	2.09	560
5. Pharmacy Recommended to other patients Domain Prefer to visit the pharmacy again or recommend to your brothers or friends	82	225	176	57	14	3.55	554
6. Overall Patient Satisfaction with Pharmacy Services Domain: Your general evaluation for the pharmaceutical care is very satisfied	92	259	153	34	18	3.67	556
<b>answered question</b>							<b>565</b>
<b>skipped question</b>							<b>52</b>

friends of 3.55 (Tables 2 and 3).

## DISCUSSION

The pharmacy administration in Ministry of Health in the Kingdom of Saudi Arabia established the updated pharmaceutical care strategic plan.<sup>9</sup> The pharmacy plan needs some key performance indicators to measure the level of success of the implementation process. Several pharmacy indicators established for each plan, for instance, in the medications safety part, the indicators were a score of Institute for Safe Medication Practices (ISMP) self-assessment of medications safety at the hospital.<sup>10</sup> The indicator for the pharmacy plan of the national drug information centers was the cost avoidance of answering information inquiries.<sup>11</sup> The indicator for the ambulatory care pharmacy was the patient satisfaction with pharmacy services.<sup>1,12</sup> However, the patient's perception of a pharmacist during pharmacy visit is another tool of strategic plan measurement. In this study, the authors aimed to explore the patients' perception of the pharmacist during their visit to the ambulatory care pharmacy. According to our results, the patient's perception of the pharmacist during pharmacy visit was not adequate with an average score of less than four. The highest score was related to—the patient received most of the medications and pharmacy location was appropriate for the patient. This was related to the Saudi and Food

Drug Authority (SFDA) requirements from all the pharmaceutical companies for their medications, which should be on the market after complete registration. Furthermore, some pharmacists have implemented the inventory management system for the medications. The pharmacist plays a proper role in marketing the services of community pharmacies. The pharmacists perform systematic evaluation while choosing the pharmacy location. Thus, we can find a chain of pharmacy. Despite this, the score for appropriate location of the waiting area in the pharmacy was the lowest. Majority of pharmacies do not have an appropriate waiting area, especially in community pharmacies. This shows that the patient's perception with drug monitoring during pharmacy visit is inadequate. The reconciliation of medications obtained the highest scores as some pharmacies had an electronic prescription with a copy given to the patient, whereas other pharmacies did not have such a system. The finding agrees with those reported by Al-Arif and by Oshima *et al.*<sup>6,13</sup> The medication adherence system did not exist at most of the pharmacies. This system is absent in most of the hospitals or in community pharmacies. There are no tools available to establish medication adherence services, for instance, training programs, policies and procedures, computerized physician's order entry, and unified patient medical records. Our results with respect to the medication adherence were found to be lower than those reported by Al-Arif.<sup>6</sup> this is because,

in our study, the community and hospital pharmacies were included as responders, whereas in Al-Arifi's study, community pharmacy visitors were included as responders. Our study might actually reflect more on the real situation. Although the several most of patient's perception was found within average; the overall pharmacy evaluation was acceptable. Also, the patients recommended the pharmacy to visit by their families or friends. The getting high scores in the perceptions maybe due to the good communication skills of the pharmacist and patient counseling services provided by some pharmacists.

## 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 improve the medication non adherence and reconciliation are highly recommended to improve patient's perception of pharmacist during pharmacy visit in the Kingdom of Saudi Arabia.

## 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; **ASHP:** American Society of Health-System; **USA:** United States of America; **ISMP:** Institute for Safe Medication Practices; **SFDA:** Saudi and Food Drug Authority.

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