

# Patient's Perceptions and Attitude toward Medications in Saudi Arabia

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## Abstract

**Objective:** To explore the Patients perceptions and attitudes toward Medications in Saudi Arabia. **Methods:** It is a 4-months cross-sectional survey of patient and basic knowledge of medicines. The survey consisted of two-part, demographic information and second part forty-nine questions divided into four domains. It included domain 1: Primary or essential information about patient medication, domain 2: patient information about the drug-related problem, domain 3: patient information about drug-related cost and domain 4: patient perception of medications. Medline Plus health information and Daily Med-INH elements information from National Institute of Health United State of America were used. The 5-point Likert response scale system was used. The questions were open and closed-ended. The survey distributed through social media and at 500-bed pediatrics and maternity hospital in Asir region, at ambulatory care pharmacy. The authors did the patients interview with electronic survey documentation. The survey was made in an electronic format and it analyzed domain four patient perception of medications through survey monkey system. **Results:** The total responders were (614) Saudi patient. The gender distribution 523 (86.7%) were females and 91(13.3%) were males. The type of medication used was for Diabetes, Hypertension, Skin and Respiratory diseases. More than half of responders sometimes had difficulties in reading drug name 374 (61.6%) and 126 (20.8%) cannot know the expiration date of Medications. The responders showed that 207 (34%) takes their medication without any prior information, 276 (45.44%) described drug to the person had the same disease and 325 (53.8%) use the medication without any prescription. Also; 328 (53.3%) of responders stopped their medication when they feel better and 274 (44.9%) of them they completed entire medication course of therapy. The responders displayed that 310 (50.9%) believed that Drug Information given by health care was not enough and 238 (39.3%) of responders thought that their medication knowledge was not sufficient. **Conclusion:** There were a wrong perception and attitudes toward medications. It may lead to diseases progress, not a useful medicine and occurrence of drug-related morbidity and mortality. Global and general improvement in understanding of medications knowledge through patient counseling is mandatory.

**Key word:** Patient, Perceptions, Attitudes medications, Ministry of health, Saudi Arabia.

## INTRODUCTION

The management of illness needs to complete the cycle of healthcare plan and management. The essential part of this plan is taking medications. The background of the patient is an influential factor in the Patients attitude toward his/her medications, with the rapidly rising level of education, awareness of population health has increased. The development of the Internet and smart devices has made easy access to medical data and disease treatment methods through various channels. Some patient stated that they does not complete the treatment and wishes not to take the medication at all. Some patients under treatment not take the optimal dose or not complete the management duration. Other, they over treated and took a high dose for an extended period that may leads to toxicity. Some patient had positive perception and other had a negative perception. Some patient prescribed medication to her or his Neighbors, other does not take any medication because they are chemical and prefer to natural and herbal medications.

Patient's knowledge of medication use is not only of vital importance in the prevention of drug-related problems but also a significant factor that influences treatment success and hence if provided; it offers an opportunity for one to attain a full health potential.<sup>[1]</sup> When a patient uses the right medication in the wrong way, his condition is likely to worsen. Patient's Awareness, Attitude, Understanding and Perceptions towards the medications are vital in the desired drug response. Patients often want to obtain diverse information about their condition and discuss their illnesses and treatment with doctors. Several international studies have conducted to explore the patient's perception of medications which varies between excellent or lousy perception, attitudes and behaviors.<sup>[2-8]</sup> Few local studies explored the perception of medications, in particular, situations.<sup>[9]</sup> Most of the studies had limited number of patients and measures particular medications. Also, it is hard to find local, Gulf of Middle East countries investigated the patient attitudes toward the medications. The goal of the study was to explore the

patient's perception about medications in Kingdom of Saudi Arabia.

## METHODS

It is a 4-months cross-sectional survey of patient and basic knowledge of medicines. The survey consisted of two-part, demographic information and second part forty-nine questions divided into four domains. It included domain 1: Primary or essential information about patient medication, domain 2: patient information about the drug-related problem, domain 3: patient information about drug-related cost and domain 4: patient perception of medications. Medline Plus health information and DailyMed-INH elements information from National Institute of Health United State of America were used.<sup>[10-11]</sup> The 5-point Likert response scale system was used. The questions were open and closed-ended. The survey was distributed through social media and at 500-bed pediatrics and maternity hospital in Asir region, at ambulatory care pharmacy. The hospitals were accredited by Saudi Center for Healthcare organization (CBAHI) and Joint Commission on Hospital Accreditation from United State of America (USA).<sup>[12-13]</sup> The hospital's several departments were included such as Pediatrics, Obstetrics and Gynecology. It had Adults, Pediatrics and Neonatal critical care, with the separated nursing unit. In addition to medical and surgical sections for adults, pediatrics and neonates. The pharmacy departments distributed the medication through unit dose system according to CBAHI standards and American Society of Health-System standards. Also, the pharmacy had inpatient pharmacy, outpatient pharmacy, Intravenous Admixture services with professional Total Parenteral Nutrition. The clinical pharmacy services did not entirely exist except some programs for an instant; drug information center, patient-counseling services and medication safety program. The authors did the patients interview with electronic survey documentation. The survey was made in an electronic format and it analyzed domain four patient perception of medications through survey monkey system.

## RESULTS

The total responders were (614) patients with Saudi 564 (96.1%) and Non-Saudi 23 (3.9%) nationalities. The gender distribution 523 (85.2%) were females and 91 (14.8%) were males. The majority of them in age (18-44) 78.3% and located at Asir region 325 (52.93%) and Riyadh region 163 (26.54%). The most patients had the Bachelor Degree 311 (50.65%) followed by High school 138 (22.48%) and Diploma 47 (7.65%). The most type of medications used was anti-diabetic and anti-hypertension medicines, Skin medications and drugs for Respiratory Diseases. Also, the total patient currently taking medication were 249 (43.23%). Of those the most number of medication taken either one 96 (38.55%), two medications 79 (31.73 %), three medications 25 (10.04%) and four medications 24 (10.04%) as explored in Table 1. More than half of responders sometimes had difficulties in reading drug name 374 (61.6%) and 126 (20.8%) cannot know the expiration date of Medications. The responders showed that 207 (34%) takes their medication without any prior information, 276 (45.44%) described drug to the person had the same disease and 325 (53.8%) use the medication without a prescription. Also; 328 (53.3%) of responders stopped their medication when they feel better and 274 (44.9%) of them they completed entire medication course of therapy. The responders displayed that 310 (50.9%) believed that Drug Information given by health care was not enough and 238 (39.3%) of responders thought that their medication knowledge was not sufficient as explored in Table 2.

## DISCUSSION

The medications become more efficient in relieving/healing illnesses and improving patients' health condition. The demand for medication-related information increases in line with patients' enhanced expectations of what should provide. Patients are entitled to education on proper medication

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

Characteristics	Response N	Response %
<b>Sex</b>		
Female	523	85.2%
Male	91	14.8%
Answered question	614	100%
Skipped question	0	
<b>Nationality</b>		
Saudi	564	96.1%
Non-Saudi	23	3.9%
Answered question	587	100%
Skipped question	27	
<b>Age</b>		
<18	34	9.9%
18 - 29	267	103.0%
30 - 44	214	60.9%
45 - 59	87	22.5%
60+	12	3.6%
Answered question	614	100%
Skipped question	0	
<b>Total Experiences</b>		
Doctorate degree	7	1.14%
Master degree	17	2.77%
Bachelor Degree	311	50.65%
Diploma	47	7.65%
High school	138	22.48%
Intermediate School	33	5.37%
Primary School	27	4.40%
Not educated	34	5.54%
Answered question	614	100%
Skipped question	0	
<b>The current medications</b>		
Diabetic Medication	79	12.91%
Antihypertensive Medication	64	10.46%
Cardiac Medication	13	2.12%
Asthma Medication	50	8.17%
Derma Medication	57	9.31%
Anti-Rheumatic	32	5.23%
Do not take anything now	412	67.32%
Others	87	14.22%
Answered question	612	100%
Skipped question	2	
<b>Number of current medication taken</b>		
Nothing	327	56.77%
1	96	38.55%
2	79	31.73%
3	25	10.04%
4	24	9.64%
5	13	5.22%
6	5	2.01%
7	3	1.20%
8	0	0.00%
9	1	0.40%
10	2	0.80%
more than 10	0	0.00%
Answered question	576	
Skipped question	38	

**Table 2: The Patient Perception about Medications.**

No	Perceptions Inquiries	Response Count	Response Percent	Response Count	Response Percent	Response Count	Response Percent	answered question	skipped question
		<b>Always</b>		<b>Sometimes</b>		<b>Never</b>			
1	Are you having difficulty reading the name of your medicine	76	12.52%	374	61.61%	157	25.86%	607	7
2	Do you avoid going to the hospital expected symptoms would subside?	136	22.41%	404	66.56%	67	11.04%	607	7
		<b>Yes</b>		<b>No</b>		<b>Others</b>			
3	Can you read the expiration date printed on the medication	461	76.07%	126	20.79%	19	3.14%	606	8
4	Do you believe that the drug information given by healthcare professionals enough	274	45.07%	310	50.99%	25	4.11%	608	5
5	Do you feel that your knowledge of prescribed medications for you is good enough?	351	57.92%	238	39.27%	21	3.47%	606	8
6	Have you ever tackled a drug you do not have any prior information about	207	34.16%	391	64.52%	10	1.65%	606	8
7	Is it possible to describe another drug to a person suffering from the same illness?	276	45.54%	315	51.98%	15	2.48%	606	8
8	Is it possible to use a drug without a prescription?	325	53.81%	258	42.72%	21	3.48%	604	10
		<b>Take the entire course</b>		<b>Stop when you feel better</b>		<b>Others</b>			
9	Do you take the entire course or you just stop the medication when you feel better	274	44.92%	328	53.77%	8	1.31%	610	4

use; not only by their humanity but also by the fact that the effect of the medication (whether therapeutic, side effects, etc.) felt by the patients.<sup>[2]</sup> The patients with desired outcomes were more likely to use the drug again and were more aware of taking it on time. Patient with any difficulties in understanding the use and times of use tend to abandon the medicine, especially if the symptoms are mild. Full clarification of the patient about how to use the drug what happens in his/her body and clarify the side effects of the drug affects the patient's perceptions and attitude. Health factors were strongly related to knowledge and adherence. The participants with better health status reported that higher knowledge and adherence patients who took fewer medications were less adherent, and Feeling ill appears to be a barrier to adherence.<sup>[3]</sup> Medication knowledge (e.g., knowing the name of the medication, dosage, how to take it, etc.) is also highly correlated with medication adherence.<sup>[4]</sup> Several pharmacy practices started in the early 2010s to improve the pharmaceutical care services to offers the best care to the patients.<sup>[4]</sup> Several pharmacy programs organized to provide drug information and correct any wrong attitudes or perception of the patient. The famous program at Ministry of Health provided by the pharmacist was answering drug inquiries calling system through hotline (937). On a daily basis over 24/7, the pharmacist answers to drug information requests from the patients.<sup>[5]</sup> Also, the patient medications counseling program during patient discharge or at outpatient pharmacy or Ambulatory care medications counseling clinics.<sup>[6]</sup> The investigator wishes to explore the actual patient perception or behavior toward the medication. The finding of the study showed the half of the patients had lousy impression or perception of the medications. More than half had difficulty in reading drug name or expiry date of medications although most of the responders were

at a young age with University education level and expected to know the English language. Nevertheless, in reality not so. Because of lousy health education during school age and week health education for the public, the results of difficulties in the reading of drug name better than what reported by Perera T. *et al.* maybe because most of the country's population are not speaking very well in the English language, the finding of perception reading expiry date of medication could not compare with other studies because it was not investigated.<sup>[7]</sup> The finding showed one-third of the responders use medications without any information and almost half of the patients prescribed the medications to their friend or family expected the same disease without official diagnosis and prescriptions. That is related to dial with medications as look like as food or cosmetic without any health information that has led to progression of disease or complications or appear of drug-related problems with the patients. That is a complication to visit hospitals or admission or fealty and high economic burden on the healthcare system. The finding of the described drug to the person had the same disease is higher than that reported by Aishwaryalakshmi, K *et al.*<sup>[3]</sup> Because of our subject had lower health education than them, the other results of takes their medication without any prior information or use the medication without a prescription could not compare it with other results because it not investigated. The half of patient does not complete their duration of therapy and stop the medications by them self, that may lead to non-excellent treatment of disease and may cause the resistance of microorganisms if they used antibiotics. It may lead to the high complications of disease and the high cost of disease management. That is what resembles what reported by Aishwaryalakshmi, K *et al.*<sup>[3]</sup> The half of patients stated previous lousy perception related to week health education by healthcare

professionals and their medications knowledge is enough for appropriate drug therapy. That is what resembles what reported by Aishwaryalakshmi, K *et al.*<sup>[9]</sup> That is expected because patient counseling newly established at Ministry of Health organizations and patient medications education is not mandatory by law while dispensing medications at community pharmacies.

## CONCLUSION

Regarding patient's knowledge of medications, there is a wrong perception and attitudes toward drugs. It may lead to diseases progress, not a useful medicine and occurrence of drug-related morbidity and mortality. Improvement in understanding of medications knowledge through patient counseling is mandatory.

## ACKNOWLEDGMENT

None.

## CONFLICT OF INTEREST

None.

## ABBREVIATION

**KSA:** Kingdom of Saudi Arabia **MOH:** Ministry of Health; **CBAHI:** Saudi Center for Accreditation of Healthcare Institutions.

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