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COMPARING PATIENT SATISFACTION IN HOSPITAL VS. RETAIL PHARMACIES: INSIGHTS FROM A CROSS-SECTIONAL SURVEY IN LAHORE, PAKISTAN

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Abstract

Pharmaceutical care offers varying levels of satisfaction between retail and hospital settings to enhance patient's quality of life by providing proper medication guidance. This study aims to assess patient satisfaction with pharmacy services in both retail and hospital pharmacies among the general population of Lahore.

A cross-sectional survey was conducted using self-administered questionnaires, designed based on research articles related to community and hospital pharmacies. The survey instrument was adapted from a published questionnaire and included questions on demographics, preference levels, pharmacist availability, and patient satisfaction with pharmacy services in hospital or retail settings. Out of 400 participants, 155 (38.75%) preferred hospital setups while 245 (61.25%) preferred retail setups. Graduates and undergraduates, having sufficient knowledge and exposure to pharmacy services, were more likely to utilize them and showed a positive response. However, other individuals hesitated due to a lack of knowledge and insufficient facilities in hospital settings, which creates barriers to accessing these services.

People with greater knowledge about pharmacy services are more likely to use them. Pharmacists must understand patient expectations and provide appropriate guidance. However, due to the workload on hospital pharmacists, they often cannot interact adequately with patients, leading to lower satisfaction with hospital pharmacy services. Therefore, it is crucial to provide equal opportunities for all individuals to gain proper knowledge and awareness about pharmacy services.

Keywords: Pharmacy services, level of preference, medication adherence, pharmacist availability.

INTRODUCTION:

Initially, the pharmacy did not have such scope in the healthcare system. Since the 1950s, however, the pharmaceutical industry's large-scale manufacture of drugs has restricted pharmacist's roles to primarily mixing, distributing, and labelling of drugs recommended by physicians regardless of their precise job. Now pharmacists work in different setups including community and hospital pharmacies, regulatory and health organizations, pharmaceutical companies, and research. The majority of people trusts pharmacists regarding their medical queries. This shows the strong relationship between pharmacists and patients (1).

Pharmacy is the practice of preparing, conserving, compounding, and delivering medications. It is concerned with ensuring medication usage that is both safe and effective while a community "pharmacy" is a legal establishment that has been registered and is in compliance with local laws. Community pharmacy provides pharmacological and cognitive services in a particular community to facilitate the patient's health (2).

In the coming healthcare system, the role of the community pharmacy has been rapidly progressing from compounding to prescription handling, monitoring and reporting ADRs, reducing medication errors, counselling, providing medication advice, and interacting with healthcare professionals (3). Current community pharmacy services include providing drug information, dispensing of medicines by a pharmacist only, clinical interventions, disease preventive care services and taking part in therapeutic decisions. This advancement in pharmacy services improves the healthcare system and patients' quality of life (4).

A hospital pharmacy is a pharmacy where drugs are manufactured and purchased, stored, dispensed and their uses are monitored and also drug information, education and training are provided to inpatients, outpatients as well to related health professionals by a team of highly experienced clinical pharmacists (5).

Hospital pharmacy is a vital healthcare system that is recognized in developed countries but not in developing countries due to an increase in the variety of medicines and poor compliance. This is the main reason that focus has been shifted from pharmacists to patients. This situation has made the pharmacy discipline an important part of society. Routine drug therapy monitoring, adverse drug reaction monitoring, nutrition (parenteral and enteral) monitoring, cardiopulmonary resuscitation team response are some of the other pharmacy services frequently provided by hospitals (6).

Role of hospital pharmacy has expanded from manufacturing to therapeutic drug monitoring and beyond a modern pharmacist is expected to perform all services in relation to drugs at patient level. He obtains medication history of patients, advise the doctors in selecting appropriate drugs to the patients, monitoring therapies, clinical interventions if necessary to correct the course of treatment and also counsels the patient both at the time of treatment and at the time of discharge. Due to these wide range of functions, hospital pharmacy services have transformed from product oriented services to patient oriented services Different services provided to patients are:

- 1. Sufficient number of clinical pharmacists are on the workplace fulfilling duties in outpatient department and throughout the wards.
- 2. Taking medication history for all or specific patients admitted in the hospital and forward the relative details to physician.
- 3. Identify the drugs that the patient brought to the hospital and give advice either to use, discard or forward to doctor.
- 4. After diagnosis, the clinical pharmacist is needed to give his expert advice on suitable drug dose for the specific patient to the treating doctor.
- 5. Once treatment starts, he has to examine the patient for drug effects by conducting necessary pharmacokinetic tests.

- 6. Provides counselling to patients during their treatment and after they have been dis-charged from the hospital.
- 7. Receives and maintains the feedback by patients (7).

Other services includes, medication and inhalation counselling, lifestyle modification, drug information center, poison control center, medication adherence, harm reduction (HIV), life style modification, adverse effect & drug interaction monitoring

The study aims to determine the patient satisfaction & level of preference with pharmacy services in hospital and retail among general population of Lahore.

METHODOLOGY:

Study Design and Setting:

A questionnaire based cross-sectional study was used to evaluate patient satisfaction from general population regarding pharmacy services in hospital and retail setup of different areas of Lahore, Pakistan.

Sampling Technique & Size:

In this study, convenient sampling technique was applied and questionnaires were distributed, filled and returned. Sample size is 400 that was calculated by using Rao soft software (8).

Study Site & Duration:

The study was conducted in Lahore, from 1st April 2024 to 1st May 2024.

Ethical Approval:

The study was conducted after the approval from Institutional review board of Leads College of Pharmacy, Lahore Leads University, Lahore, Pakistan.

Data Collection:

The questionnaire was designed by in-depth evaluation of previous published research articles related to hospital and community pharmacy services (9, 10) and validated before the data collection. Data was collected randomly from general public of Lahore.

Inclusion & Exclusion Criteria:

All individuals, aged more than 15 years and individuals who can read and understand English language were included while people younger than 15 years or if they were illiterate were excluded from the study.

Questionnaire Scoring:

The questionnaire was divided into two parts: (1) Demographics, including age, gender, and education, and (2) Assessment of various pharmacy services. It contained a total of 35 questions, each scored on a 5-point Likert scale: 5 points for Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree, and 1 for Strongly Disagree.

Statistical Analysis:

For the analysis of results, SPSS-28 (Statistical Package for the Social Sciences) is employed. Mean and standard deviation were calculated for continuous variables. To test the hypothesis, a t-test, with a p-value of less than 0.05 considered statistically significant.

RESULTS:

Demographic:

Out of 400 random participants, 155 preferred hospital pharmacies and 245 preferred retail pharmacies. We categorized the participants into Hospital Pharmacy (N=155) and Retail Pharmacy (N=245). The study included individuals aged 15 years and older. The majority (44.75%) were aged 35-55 years, followed by 56-75 years (29.00%), with the smallest group being 75-95 years old (5.75%). Among the respondents, 56.25% were male and 43.75% were female. We considered five educational categories: Graduates, Undergraduates, Intermediate, Matric, and Middle. The study also evaluated pharmacist availability in both hospital and retail setups.

Level of satisfaction towards Retail Pharmacy:

Table 1 shows that the response rate in the retail setup was 61.25%, with 245 out of 400 distributed questionnaires filled and returned. Patient satisfaction levels were higher in the retail setup compared to the hospital setup. Respondents in the retail setup agreed that pharmacists clearly explained all possible side effects, provided comprehensive information on drug therapy, and addressed diseases effectively.

Table 1: Level of satisfaction of Retail Pharmacy
Which setup you prefer to buy medicines? = Retail Pharmacy N =245 (61.25%)

	Strongly		macy iv		Strongly
	Agree (N) (%)	Agree (N) (%)	Neutral (N) (%)	Disagree (N) (%)	Disagree (N) (%)
Is the pharmacy located at a convenient place?	75 (30.6)	132 (53.9)	34 (13.9)	4 (1.6)	0 (0)
Do you think the environment of your pharmacy is clean and tidy?	66 (26.9)	139 (56.7)	34 (13.9)	5 (2.0)	1 (0.4)
Do you feel comfort and convenience with waiting time for getting your medicine?	33 (13.5)	113 (46.1)	78 (31.8)	20 (8.2)	1 (0.4)
- Is there enough staff available to manage the workload?	31 (12.7)	122 (49.8)	66 (26.9)	24 (9.8)	2 (0.8)
Does your pharmacist prescribe medications on minor ailments?	23 (9.41)	117 (47.8)	44 (18.0)	28 (11.4)	33 (13.5)
Does a pharmacist demand prescription before narcotics dispensing?	45 (18.4)	94 (38.4)	53 (21.6)	24 (9.8)	291 (11.8)
Are you satisfied with the counselling services provided by the pharmacist?	56 (22.9)	104 (42.4)	32 (13.1)	291 (11.8)	24 (9.8)
Do you have easy access to online drug information service?	47 (19.2)	89 (36.3)	38 (15.5)	43 (17.6)	28 (11.4)
Do you feel hesitant to ask pharmacists to counsel related health and medication problems?	8 (3.3)	23 (9.4)	29 (11.8)	147 (60.0)	38 (15.5)
Do you face a language barrier in communication with your pharmacist?	11 (4.5)	44 (18.0)	19 (7.8)	121 (49.4)	50 (20.4)
Does your pharmacist keep your information private?	32 (13.1)	107 (43.7)	46 (18.8)	30 (12.2)	30 (12.2)
Does your pharmacist recounsel you on request?	29 (11.8)	112 (45.7)	47 (19.2)	18 (7.3)	39 (15.9)
Does the pharmacist counsel you regarding your lifestyle modifications in a specific disease?	27 (11.0)	84 (34.3)	56 (22.9)	42 (17.1)	36 (14.7)
Does your pharmacist understand manual prescription or demands E-prescription?	35 (14.3)	115 (46.9)	39 (15.9)	26 (10.6)	30 (12.2)
Does the pharmacist tell you what to do if you missed the dose?	38 (15.5)	93 (38.0)	41 (16.7)	39 (15.9)	34 (13.9)
Have you ever been advised about the course completion of antibiotics?	42 (17.1)	104 (42.4)	68 (27.8)	25 (10.2)	6 (2.4)
Does the pharmacist suggest you about cost-effective alternatives to your medicines?	65 (26.5)	74 (30.2)	42 (17.1)	19 (7.8)	45 (18.4)
Are you satisfied with the necessary instructions and warnings about your medications (side effects, drugdrug interactions, and drug-food interactions)?	23 (9.4)	99 (40.4)	48 (19.6)	41 (16.7)	34 (13.9)
Does the pharmacist guide you about communicable diseases?	29 (11.8)	92 (37.6)	47 (19.2)	31 (12.7)	46 (18.8)
Does your pharmacist provide you with non-paid services like blood pressure and weighing machine?	33 (13.5)	91 (37.1)	47 (19.2)	36 (14.7)	38 (15.5)
Does the pharmacist guide you about the use of surgical instruments?	27 (11.0)	77 (31.4)	53 (21.6)	59 (24.1)	29 (11.8)

27 (11.0)	95 (38.8)	53 (21.6)	50 (20.4)	20 (8.2)
30 (12.2)	103 (42.0)	79 (32.2)	26 (10.6)	7 (2.9)
35 (14.3)	105 (42.9)	47 (19.2)	50 (20.4)	8 (3.3)
40 (16.3)	143 (58.4)	36 (14.7)	21 (8.6)	5 (2.0)
34 (13.9)	84 (34.3)	65 (26.5)	17 (6.9)	45 (18.4)
34 (13.9)	100 (40.8)	56 (22.9)	11 (4.5)	44 (18.0)
44 (18.0)	113 (46.1)	61 (24.9)	24 (9.8)	3 (1.2)
25 (10.2)	113 (46.1)	69 (28.2)	29 (11.8)	9 (3.7)
92 (37.6)	83 (33.9)	32 (13.1)	6 (2.4)	32 (13.1)
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Level of satisfaction of Hospital Pharmacy:

Table 2 shows that the response rate in the hospital setup was 38.75%, with 155 out of 400 distributed questionnaires filled and returned. This indicates that patient satisfaction levels in the hospital setup were lower, primarily due to a lack of counseling and proper guidance regarding medications.

Table 2: Level of satisfaction of Hospital Pharmacy Which setup you prefer to buy medicines? = Hospital Pharmacy N=155 (38.75%)

	Strongly				Strongly
	Agree	Agree	Neutral	Disagree	Disagree
	(N) (%)				
Is the pharmacy located at a convenient place?	43 (27.7)	77 (49.7)	13 (8.4)	19 (12.3)	3 (1.9)
Do you think the environment of your pharmacy is clean and tidy?	32 (20.6)	73 (47.1)	22 (14.2)	19 (12.3)	9 (5.8)
Do you feel comfort and convenience with waiting time for getting your medicine?	25 (16.1)	65 (41.9)	36 (23.2)	21 (13.5)	8 (5.2)
Is there enough staff available to manage the workload?	28 (18.1)	71 (45.8)	31 (20.0)	24 (15.5)	1 (0.6)
Does your pharmacist prescribe medications on minor ailments?	23 (14.8)	70 (45.2)	34 (21.9)	23 (14.8)	5 (3.2)
Does a pharmacist demand prescription before narcotics dispensing?	41 (26.5)	65 (41.9)	33 (21.3)	13 (8.4)	3 (1.9)
Are you satisfied with the counselling services provided by the pharmacist?	24 (15.5)	66 (42.6)	34 (21.9)	27 (17.4)	4 (2.6)
Do you have easy access to online drug information service?	21 (13.5)	52 (33.5)	40 (25.8)	35 (22.6)	7 (4.5)
Do you feel hesitant to ask pharmacists to counsel related health and		<u> </u>	` ′	ì	
medication problems?	19 (12.3)	61 (39.4)	32 (20.6)	34 (21.9)	9 (5.8)
Do you face a language barrier in communication with your pharmacist?	24 (15.5)	37 (23.9)	24 (15.5)	50 (32.3)	20 (12.9)
Does your pharmacist keep your information private?	35 (22.6)	75 (48.4)	32 (20.6)	10 (6.5)	3 (1.9)
Does your pharmacist re-counsel you on request?	26 (16.8)	64 (41.3)	42 (27.1)	20 (12.9)	3 (1.9)
Does the pharmacist counsel you regarding your lifestyle modifications in a specific disease?	24 (15.5)	76 (49.0)	42 (27.1)	7 (4.5)	6 (3.9)
Does your pharmacist understand manual prescription or demands E-prescription?	19 (12.3)	66 (42.6)	47 (30.3)	20 (12.9)	3 (1.9)
Does the pharmacist tell you what to do if you missed the dose?	20 (12.9)	68 (43.9)	37 (23.9)	26 (16.8)	4 (2.6)
Have you ever been advised about the course completion of antibiotics	22 (14.2)	59 (38.1)	35 (22.6)	37 (23.9)	2 (1.3)
Does the pharmacist suggest you about cost-effective alternatives to your medicines?	17 (11.0)	50 (32.3)	28 (18.1)	48 (31.0)	12 (7.7)
Are you satisfied with the necessary instructions and warnings about					
your medications (side effects, drug-drug interactions, and drug-food interactions)	21 (13.5)	59 (38.1)	50 (32.3)	22 (14.2)	3 (1.9)
Does the pharmacist guide you about communicable diseases?	22 (14.2)	61 (39.4)	42 (27.1)	26 (16.8)	4 (2.6)
Does your pharmacist provide you with non-paid services like blood pressure and weighing machine?	21 (13.5)	58 (37.4)	40 (25.8)	31 (20.0)	5 (3.2)
Does the pharmacist guide you about the use of surgical instruments?	16 (10.3)	63 (40.6)	45 (29.0)	25 (16.1)	6 (3.9)
Does pharmacist provide you comfortable medium for discussion on	22 (14.2)	74 (47.7)	37 (23.9)	20 (12.9)	2 (1.3)
disease management when needed?	` ´	` ′	` ′	` ′	` ′
Is there proper labelling on the medicines being compounding?	28 (18.1)	85 (54.8)	31 (20.0)	10 (6.5)	1 (0.6)
Does the pharmacist provide a you with the information about the proper method of storage of your medication?	27 (17.4)	80 (51.6)	35 (22.6)	13 (8.4)	0 (0.0)
Do you think that proper temperature maintained at your pharmacy for					
thermolabile medications like insulin?	36 (23.2)	64 (41.3)	26 (16.8)	27 (17.4)	2 (1.3)
Does the pharmacist follow up dispensing medication on your next visit?	19 (12.3)	69 (44.5)	40 (25.8)	22 (14.2)	5 (3.2)
_ = = = p === p ==	(12.0)		(20.0)	(12)	- (5.2)

Do you trust your pharmacist regarding all the information he provides	33 (21.3)	79 (51.0)	32 (20.6)	9 (5.8)	2 (1.3)
at the pharmacy? Does the pharmacist encourage you to achieve treatment goals?	19 (12.3)	69 (44.5)	32 (20.6)	33 (21.3)	2 (1.3)
- Do you want the visual display of drug administration by inhaler?	27 (17.4)	59 (38.1)	38 (24.5)	26 (16.8)	5 (3.2)
Are you satisfied with the pharmacy services that your pharmacist	33 (21.3)	73 (47.1)	33 (21.3)	13 (8.4)	3 (1.9)
provided you?					

Table 3 shows difference between pharmacy services by applying T-Test. The hypothesis are considered as:

H₀= there is no significance difference between pharmacy services in hospital and retail.

H₁=there is significance difference between pharmacy services in hospital and retail.

A p-value less than 0.05 (typically \leq 0.05) is statistically significant. As given in tables 3, all the values are less than 0.05. It indicates strong evidence against the null hypothesis. So, the alternative hypothesis H_1 is correct that is significant difference is present in pharmacy services in hospital and retail pharmacy.

Table 3:Evaluation of pharmacy services

	Hospital Pharmacy (N=155)		Retail Pharmacy (N=245)		P- Value
	Mean	S.D	Mean	S.D	Sig.
Pharmacist Availability	1.0000	0.00000	0.8367	0.37036	0.000
Is the pharmacy located at a convenient place?	3.89	1.010	4.13	0.703	0.001
Do you think the environment of your pharmacy is clean and tidy?	3.65	1.115	4.08	0.723	0.000
Do you feel comfort and convenience with waiting time for getting your medicine?	3.50	1.077	3.64	0.831	0.000
Is there enough staff available to manage the workload?	3.65	0.971	3.64	0.856	0.055
Does your pharmacist prescribe medications on minor ailments?	3.54	1.021	3.28	1.197	0.014
Does a pharmacist demand prescription before narcotics dispensing?	3.83	0.981	3.42	1.234	0.000
Are you satisfied with the counselling services provided by the pharmacist?	3.51	1.304	3.57	1.238	0.030
Do you have easy access to online drug information service?	3.29	1.099	3.34	1.285	0.006
Do you feel hesitant to ask pharmacists to counsel related health and medication problems?	3.30	1.119	2.25	0.940	0.000
Do you face a language barrier in communication with your pharmacist?	2.97	1.306	2.37	1.129	0.002
Does your pharmacist keep your information private?	3.83	0.918	3.33	1.212	0.000
Does your pharmacist re-counsel you on request?	3.30	1.247	3.58	0.979	0.001
Does the pharmacist counsel you regarding your lifestyle modifications in a specific disease?	3.10	1.241	3.68	0.925	0.001
Does your pharmacist understand manual prescription or demands E-prescription?	3.50	0.935	3.40	1.216	0.000
Does the pharmacist tell you what to do if you missed the dose?	3.25	1.287	3.48	1.002	0.000
Have you ever been advised about the course completion of antibiotics?	3.40	1.042	3.62	0.967	0.040
Does the pharmacist suggest you about cost-effective alternatives to your medicines?	3.08	1.176	3.39	1.426	0.003
Are you satisfied with the necessary instructions and warnings about your medications (side effects, drug-drug interactions, and drug-food interactions)	3.15	1.219	3.47	0.982	0.000
Does the pharmacist guide you about communicable diseases?	3.11	1.312	3.46	1.014	0.000
Does your pharmacist provide you with non-paid services like blood pressure and weighing machine?	3.18	1.285	3.38	1.052	0.003
Does the pharmacist guide you about the use of surgical instruments?	3.37	1.060	3.06	1.213	0.005
Does pharmacist provide you comfortable medium for discussion on disease management when needed?	3.61	0.929	3.24	1.143	0.000
Is there proper labelling on the medicines being compounding?	3.83	0.820	3.50	0.939	0.001
Does the pharmacist provide you with the information about the proper method of storage of your medication?	3.78	0.832	3.44	1.068	0.000
Do you think that proper temperature maintained at your pharmacy for thermo-labile medications like insulin?	3.68	1.056	3.78	0.891	0.000
Does the pharmacist follow up dispensing medication on your next visit?	3.48	0.989	3.18	1.294	0.001
Do you trust your pharmacist regarding all the information he provides at the pharmacy?	3.85	0.866	3.28	1.286	0.000

Does the pharmacist encourage you to achieve treatment goals?	3.45	1.001	3.70	0.918	0.023
Does your pharmacist provide you visual display of drug administration	3.50	1.065	3.47	0.956	0.047
by inhaler?					
Are you satisfied with the pharmacy services that your pharmacist	3.77	0.944	3.80	1.322	0.000
provided you?					

DISCUSSION:

Results of assessing patient satisfaction with pharmacy services can enhance the communication among patients and pharmacists. It can also improve the quality of these services and fulfill the expectations of patients regarding these services. We conducted cross-sectional study among 400 patients from 1st April to 1st May, 2024 to evaluate their satisfaction with pharmacy services provided in retail and hospital pharmacies. An interviewer administered pharmacy encounter survey (PES) face to face in pharmacy. The present cross- sectional survey showed that patients coming to the hospital pharmacy had high expectations to get good pharmacy services from the pharmacists. Most of them expect comfortable waiting area before being served and their prescription being checked by the pharmacist for completeness and legality.

The satisfaction level of patients with hospital pharmacies was low as compared to community pharmacies may be due to their less interaction with pharmacist because being dependent stakeholders, pharmacists working in hospitals of Pakistan are highly reliant upon administration bodies for licensing and approval (11). As out of 400 participants Table 4 showed that 245 individuals preferred retail pharmacies and 155 preferred hospital pharmacies. Availability of pharmacist in hospital pharmacies was better reported (90%) as compared to Saudi Arabia (71.4%) (12). Males were more satisfied with the hospital pharmacy services as most of the females were hesitant to ask or interact with the pharmacist. It was also evaluated that the patients with only secondary education were least (5%) satisfied due to the lack of knowledge (13).

It was evaluated that patients were more satisfied (22.9%) with counselling services provided by pharmacist at community pharmacy (9). Satisfaction level of patients was high (26.5%) regarding retail pharmacist suggestions on cost effective alternatives of medicines as compared to hospital pharmacists as there were variety of brands available. It was evaluated that the necessary instructions and warnings for medications were mostly not conveyed (9.4%) as in Saudi Arabia(14). Most of the patients were satisfied with the pharmacy services that pharmacist provided them (37.6%) but some patients undergone unpleasant experience with consultation services provided by pharmacists in UAE may be due to the fact that counselling is not a routine procedure in community pharmacies there(15). In the end it was evaluated that the patients trusted on pharmacist (21.3%) more regarding all the information provided in community pharmacies as compared to hospitals (13.9%). So, our study evaluated that patient satisfaction was less with hospital pharmacies as in Ethiopia(13). The overload of patients may be a hurdle in the ability of the pharmacist to interact with other healthcare professionals and patients directly. The environment of the hospital pharmacy was not hygienic and patients had to wait for long time to get their medicines. There was no proper place available for interaction with the pharmacist regarding patients' life style modifications, medication queries, course completion of antibiotics, cost-effective alternatives, missed dose, disease management, drug interactions, ADRs and communicable diseases. Results showed that satisfaction level was very low with the pharmacy services in hospitals.

A cross-sectional study was conducted among 422 patients to assess the satisfaction with the pharmacy services in public hospitals located in Eastern Ethiopia from September to January in 2018. It was found that the patients who only attended secondary education were less likely to be satisfied. In contrast, rural dwellers and patients who collected all their medications from respective hospitals were more satisfied. A study was conducted to evaluate patient satisfaction with pharmaceutical services at retail pharmacies. An interviewer administered pharmacy encounter survey (PES) face to face to people after visits to randomly selected community pharmacies in Philadelphia Country, Pennsylvania. An aggregate of responses showed very good rating given by most respondents. They

were most satisfied with Pharmacy location and least satisfied with time spent waiting for prescriptions to be filled(9).

Patients were more satisfied with the services provided at community pharmacies as there was enough staff available to handle the crowd. The highest level of satisfaction observed was regarding receiving instructions with clear language. Satisfaction level of patients was high due to telephonic access and proper area was available for counseling in most of the retail pharmacies. Prescription handling was proper in most of the retail pharmacies and the patients were guided regarding the administration of medicines and their side effects. It was observed that the people that were not well educated faced were less likely to understand pharmacist guidelines especially in case of inhalers. So, it is suggested that there should be visual display of drug administration through inhalers that would be very helpful especially for uneducated people.

CONCLUSION:

Results of the present study showed more patient satisfaction with retail pharmacy services as compare to the hospital pharmacy services. However, our results also indicated that most patients are not aware of what information to expect from pharmacist and how to avail other pharmacy services. So, the pharmacist needs to fully practice his/her role to the advantage of the patients and topics on responsible pharmacy practice must be incorporated in curriculum of undergraduate pharmacy students and continuing pharmaceutical educational programs for practicing pharmacists. In addition, programs must be initiated and directed to increase public awareness of the information they should not only expect but demand when purchasing medications from both retail and hospital pharmacy. It was evaluated that there should be the visual display of administration of medicines specially of those taken through devices like inhalers. As a result, we can conclude that there is need to provide equal chances to all population to get proper knowledge and awareness about pharmacy services.

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