

Preliminary Study of Patients' Perceptions and Satisfaction in Outpatient Pharmacies at the Cancer and Heart Centres in Qatar

Ghasoub R¹, Zaidan M², Al-Yafie S³, Al-Siyabi K⁴, Radwan Y² and Mohamed Ibrahim M⁵

¹National Center for Cancer Care & Research, Doha, Qatar

²Aspetar, Qatar Orthopedic and Sport Medicine Hospital, Doha, Qatar

³Heart Hospital, Hamad Medical Corporation, Doha, Qatar

⁴King Saud Medical City, Riyadh, Saudi Arabia

⁵College of Pharmacy, Qatar University, Doha, Qatar

Abstract

Background: Patient satisfaction is a worldwide goal of health care organizations and is considered as an indicator for the quality of healthcare services provided in any health care sector.

Purpose: To assess patients' perceptions and satisfaction in the outpatient pharmacies at the National Centre for Cancer Care and Research (NCCCR) and the Heart Hospital (HH) at Hamad Medical Corporation (HMC) in Qatar.

Methods: A cross-sectional, descriptive study was conducted at the HH and the NCCCR from February to March 2013 using validated and piloted questionnaire. The self-administered questionnaire consisted of 5 sections: patients socio-demographic characteristics, five perception statements regarding pharmacy layout and waiting area, six statements regarding patients interaction with pharmacists, four perception questions concerning pharmacists' skills and two statements regarding the overall satisfaction. All statements were assessed with 5 points Likert scale. The survey was distributed to patients visited HH and NCCCR during the study period. Data was analysed descriptively using SPSS version 18.

Results: A total of 198 participants completed the survey. Assessment of patients' satisfaction with the general pharmacy layout revealed that 93% of respondents were satisfied with pharmacy physical layout and 99% with dispensing area. With regard to patient's perception about interaction with pharmacists, the majority of respondents expressed high satisfaction with pharmacists' professionalism (99%), time spent consulting them (98%) and pharmacists' willingness to answer their inquires (99%). Top rated pharmacists' skill by patients was pharmacists' explanation to treatment (97%). Finally, the overall satisfaction was 98% with the service provided in pharmacy and 99% with the pharmacy staff.

Conclusion: The preliminary study showed a high level of patients' satisfaction with the pharmacy layout, as well as with the pharmacy staff.

Keywords: Outpatient; Pharmacy; Perceptions; Satisfaction; Pharmacist

Introduction

Patient satisfaction is a main goal of health care organizations and is considered as an indicator for the quality of healthcare services provided in any health care sector [1]. Throughout the years, there has been a substantial increase in the attention paid on patient satisfaction, especially after the evolution of pharmacy profession and the introduction of patient centred care concept [1,2]. As more health care services become oriented toward provision of patient centred care, it becomes imperative to identify the areas that need to be improved in both technical and clinical aspects of services provided by pharmacists [3,4].

Many studies showed that patients' perception on their interaction with pharmacists and the service provided to them is correlated with improving their health outcomes; such as compliance to medications instructions, managing their own condition and refilling medications [4-7]. Furthermore, data resulting from evaluating patients' satisfaction can help not only in identifying patient needs and perceptions, but also in identifying areas that need improvement in services provided [8,9].

Hamad Medical Corporation (HMC) is considered the primary non-profit healthcare institution in Qatar, comprises of eight hospitals offering a variety of acute and tertiary healthcare services [10]. All hospitals under this organization are accredited from the Joint Commission International (JCI), the largest healthcare organization

in the United States that provides international accreditation and certification to healthcare organizations all over the world [11]. The National Center for Cancer Care and Research (NCCCR) and the Heart Hospital (HH) are specialized centres of HMC; despite the differences in patients' clinical needs of both hospitals and the complexity of healthcare services provided, the pharmacy department of both hospitals is managed by the same administration and currently have similar Outpatient (OPD) structure design.

As the HH was newly established in 2010, the OPD pharmacy was originally designed taking into considerations the patients complain in other hospitals and the national criteria of JCI accreditation

***Corresponding author:** Manal Al Zaidan, Pharmacy Director, Aspetar, Qatar Orthopedic and Sport Medicine Hospital, Doha, Qatar, Tel: +974-44132122; Fax: +974-44132026; E-mail: Manal.Zaidan@aspetar.com

Received: September 29, 2017; **Accepted:** November 04, 2017; **Published:** November 10, 2017

Citation: Ghasoub R, Zaidan M, Al-Yafie S, Al-Siyabi K, Radwan Y, et al. (2017) Preliminary Study of Patients' Perceptions and Satisfaction in Outpatient Pharmacies at the Cancer and Heart Centres in Qatar. J Appl Pharm 9: 254. doi: 10.21065/1920-4159.1000254

Copyright: © 2017 Ghasoub R, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

standards. However, the layout of OPD pharmacy at NCCCR had to be renovated, given that the hospital was established in 2004. Before renovation, patients were served in OPD pharmacy through one window, comprehensive patients counselling was lacking and there was no waiting area to accommodate waiting patients. Fortunately, the NCCCR administration approved a proposed renovation in late 2011 and agreed to adopt a similar layout of HH pharmacy.

An open system was implemented in line with "the pharmacy without wall concepts", where pharmacists are placed in front of the pharmacy counters, allowing for transparency and friendly encounters. Except for the consultation counters; all physical barriers have been removed to allow patients to watch pharmacists while they are processing prescriptions, from receiving prescriptions, reviewing for appropriateness, medication preparation, and patient counselling. Thus, the layout created an environment conducive to education as it allowed for one-to-one education, where a single pharmacist is responsible for processing one prescription at a time while the patient is setting. In addition, spacious separate male and female waiting areas were placed at pharmacy entrance along with numbering system devices to organize patients flow. On top of that circular rotating medication storage shelves were installed for fast moving drugs, close to consultation windows within pharmacist reach to eliminate time wasted in preparing prescriptions

A majority of the studies in the literature evaluated patients' satisfaction regarding dispensing services and general layout of pharmacies [12-15]. Though, only few studies have assessed clinical dimensions of services provided at hospital setting including: courtesy of pharmacists, communication skills of pharmacists and counselling skills [7,12,13]. Nonetheless, no published studies to assess the patients' perception and satisfaction after improvement of the pharmacy have been conducted in outpatient pharmacies in Qatar. The aim of this study was to assess patients' perception and satisfaction with all aspects of services provided in outpatient pharmacy and to identify potential areas for improvement.

Methods

Study design

A cross sectional study was conducted at HH and NCCCR from February, 2013 to March, 2013. A validated self-administered, anonymous and descriptive questionnaire was used to address the study objectives in both setting. The study was approved by Ethics Committee of Hamad Medical Corporation Research Center.

Study population

Eligible participants were patients or caregivers aged 15-80 years old, who visited the outpatient pharmacy for filling their prescription during the regular business hours; five days weekly. Participants were selected based on convenient. Participants who wished to fill the survey were asked voluntarily to fill the survey and handed back it at the same time in out-patient pharmacy. Any participant who couldn't read the survey in Arabic or English was excluded.

Survey questionnaire

The survey used in the current study was adopted from another study, but two questions were modified after the piloting. 13 Before the implementation; the survey was translated from English into Arabic i.e. forward and backward steps, and piloted in both languages for clarity and time to completion. The survey consisted of 22 questions divided

into 5 sections: The first section included five questions related to social and demographic characteristics, the second section contained within five questions assessed patients' satisfaction with pharmacy layout and waiting area; the third section evaluated patients perception regarding their interaction with pharmacists in six statements, The fourth section included four questions about pharmacists' skills and the last section evaluated the overall satisfaction in two statements. For additional comments, participants were asked to write their feedback in additional section. Questionnaire items were measured using a five-point Likert scale responses: 1) strongly agree, 2) agree, 3) neutral, 4) disagree and 5) strongly disagree.

Data analysis

Descriptive analysis was carried out using SPSS version 18 for all survey's sections. Further analysis of data was done after collapsing the responses to 3 points: Agree, neutral and disagree (Table 1).

Results

Over a four week period, 198 participants completed the survey. From those, 59% of surveys were completed by patients, while 41% of the surveys were completed by patients' caregivers (Table 2).

The average age of patients was 40 with a range of (18-75) years old. Nearly 67% of the respondents were male. Sixteen different nationalities were identified in the study sample. The most common

S. no	Statement	Agree	Neutral	Disagree
1	The pharmacist explains how to take your medication	97	3	0
2	The pharmacist explains how the medication works and its effects	94	5	1
3	The pharmacist informs you of the side effects associated with your medication	87	10	3
4	The pharmacist asks about any changes to your state of health since your last visit	86	11	3

Table 1: Patients responses regarding pharmacists' skills.

Variable	Percentage	Number (n)
Responses /Hospital		
HH	49	98
NCCCR	51	100
Gender		
Male	67	117
Female	33	57
Total responses		174
Age, Years Average (range)	-	40 (18 – 75)
Patients	66	111
Caregivers	34	57
Total responses		168
Number of visits		
First time	13	21
1-10 visits	28	46
1 year	14	23
>1 year	44	72
Total responses: 162		
Nationality^a		
Qatari	21	38
Others	79	140

^a The total percentage is not equal to 100 due to missing values.

Table 2: Participants demographics.

nationalities were Qataris (23%), followed by Egyptian (19%), Indian (13%) and Filipino (12%). The majority of respondents (44%) indicated that they visited the outpatient pharmacy for more than 1 year, while 13% of respondents visited the pharmacy for the first time.

In terms of satisfaction, 99% were highly satisfied with both patient waiting area and the accessibility of dispensing area, 90% agreed that the payment process is convenient, while only 4% disagreed. Participants were asked whether they see the time spent with them as reasonable. Around 89% of respondents agreed on this statement and only 4% disagreed. The survey investigated participants' opinion about privacy provided in pharmacy layout; 92% agreed that the layout provided privacy for the patients (Figure 1).

The top rated statement in the third section was regarding willingness of pharmacists to answer their questions, which showed 99% agreement. Similarly, pharmacists' professionalism and dealing with patients in a friendly way were rated highly by respondents (99%). Majority of the patients (98%) were satisfied with the time allocated by pharmacists to patients need. When respondents were asked whether pharmacists ask them if they are seeing better results with their treatment, 91% agreed.

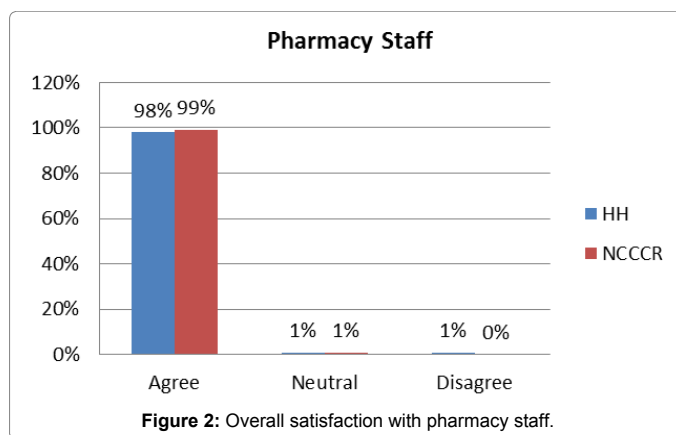
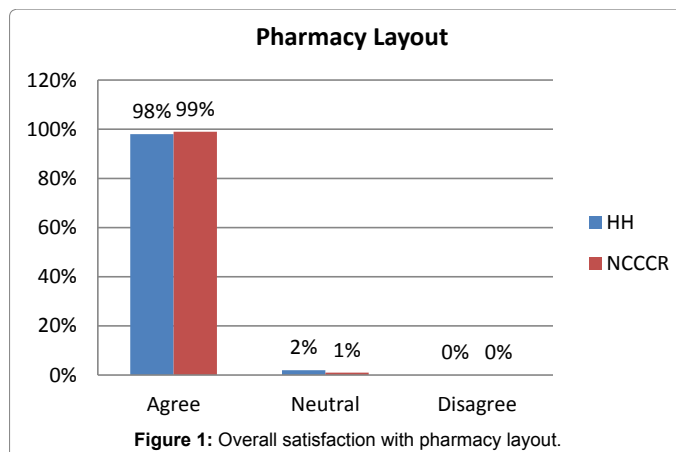
Most of the patients (97%) agreed that pharmacists explain to them how to take their medications. Similarly, 94% of the participants agreed that the pharmacists explain to them the clinical efficacy expected from their medications. In response to this statement, 87% agreed on that, whereas 3% disagreed. Lastly, in this section, participants were asked if pharmacists ask them about any changes occurred at their state of health since their last visit and a major proportion of respondents agreed (86%), the overall satisfaction results in the last section were 99% with the service provided in pharmacy and 99% with pharmacy staff (Figure 2).

Discussion

This study is, to our knowledge, the first in Qatar to assess patients' satisfaction with outpatient pharmacies. The fact that the study was conducted in two different hospitals with the similar outpatient design suggests that the results obtained from this study are likely to be related to the implemented outpatient system. An unpublished survey conducted in HMC on March, 2013 to evaluate patients' satisfaction in all its hospitals revealed that patients had comments regarding pharmacists' behaviour and long waiting time in pharmacies. In contrast, our results indicated that patients in NCCCR and HH are highly satisfied with time spent in serving them in out-patients' pharmacy, as well as pharmacists' skills. Thus, our results are likely to be generalizable and applicable to similar systems and might allow other hospitals to identify area that should be reassessed within their system.

The majority of the responses toward current services provided were favourable for both pharmacy layout and pharmacists. Study carried out by Marquez-Peiro and Perez-Peiro indicated that areas that patients' expected for changes are the dispensing area, dispensing process as well as increased in structural and human resources [15].

Every stakeholder in the healthcare system is looking for help to improve patient satisfaction, and there is a need for hospital pharmacists and pharmacy services to step up and evolve with health care reform. A number of limitations have been identified in our study. First, the sample size of the study was small considering the



number of patients who visit both hospitals. Around 350 patients visit HH OPD pharmacy on a daily bases, while the estimated number of patients per day in NCCCR is 100 patients. However, due to workload and the high volume of prescriptions, only 198 patients agreed to be surveyed during the preliminary data collection period. As this is a preliminary study, the authors planned to expand the study to all HMC hospitals. Second, the survey used did not include questions regarding other aspects of pharmacists' clinical services, such as provision of health promotion advices, referral recommendations to other specialties and if pharmacists provided them with educational pamphlet regarding their medications. Therefore, there is a need for further assessment to other aspects of clinical services provided in study settings. Furthermore, the study did not include pre-assessment of the situation which will be very interesting to conduct a pre-post study. Lastly, this was a self-administered survey; therefore illiterate patients could not be enrolled in the study.

Conclusion

The study showed a high level of patients' satisfaction with the pharmacy layout, as well as with the pharmacy staff. Assessment of patients' perception regarding pharmacists' skills revealed specific areas that need to be improved in pharmacists' interaction with patients as well as pharmacists skills such as; informing patients about side effects of medications, and asking patients about changes that occurred in their state of health. Further assessment is needed to evaluate other aspects of clinical services provided in study setting.

Acknowledgments

Mr. Mahmoud Al-Raisi, executive director of HH for his support and approval of implementing the outpatient pharmacy's concept. Mr. Naji Al-Mannai, executive director of NCCCR for his support in renovating outpatient pharmacy. The NCCCR OPD renovation committee: Mr. Bashar Fouad, Mr. Jesse Ortiguerra, Mr. Carlos Aguirre, Mr. Mohammed Shaffi, Mr. Jovencio Rada, Ms. Aysha Ramadan. The authors would like also to thank the pharmacy team of HH and NCCCR.

References

1. Schommer JC, Kucukaslan SN (1997) Measuring patient satisfaction with pharmaceutical services. *Am J. Health. Syst Pharm* 54: 2721-2732
2. Larson LN, Rovers JP, Mackeigan LD (2002) Patient satisfaction with pharmaceutical care: Update of a validated instrument. *J Amer Pharm Assoc* 42: 44-50.
3. Francisco J, Pérez C (2008) Evaluation of patient satisfaction in outpatient pharmacy. *Farm Hosp* 32: 71-76.
4. Nau DP, Ried LD, Lipowski EE, Spivey-Miller S (2000) Patients' perceptions of the benefits of pharmaceutical care. *J Am Pharm Assoc* 40: 36-40
5. Alghurair SA, Simpson SH, Guirguis LM (2012) What elements of the patient-pharmacist relationship are associated with patient satisfaction? *Patient Prefer Adherence* 6: 663-676.
6. Pringle J, Melczak M, Aldridge A, Snyder M, Smith R (2011) Medication adherence and its relationship to the therapeutic alliance: results from an innovative pilot study within a community pharmacy MTM practice. *Innov Pharm* 33: 1-16.
7. Worley MM (2006) Testing a pharmacist-patient relationship quality model among older persons with diabetes. *Res Social Adm Pharm* 2: 1-21
8. Ried LD, Wang F, Young H, Awiphan R (1999) Patients' satisfaction and their perception of the pharmacist. *J Am Pharm Assoc* 39: 835-842.
9. Padwal RS, Majumdar SR, Klarenbach S, Birch DW, Karmali S, et al. (2012) Health status, quality of life and satisfaction of patients waiting multidisciplinary bariatric care. *BMC Health Serv Res* 12: 139.
10. Hamad Medical Corporation. Qatar.
11. The Joint Commission. United States.
12. Pierce RA, Rogers EM, Sharp MH, Musulin M (1990) Outpatient pharmacy redesign to improve workflow, waiting time, and patient satisfaction. *Am J Hosp Pharm* 47: 351.
13. Afolabi MO, Afolabi ER, Faleye BA (2012) Construct validation of an instrument to measure patient satisfaction with pharmacy services in Nigerian hospitals. *Afr Health Sci* 12: 538-544.
14. Panvelkar P, Saini B, Armour C (2009) Measurement of patient satisfaction with community pharmacy services: a review. *Pharmacy World & Science*. 31: 525-537.
15. Naidu A (2009) Factors affecting patient satisfaction and healthcare quality. *Int J Health Care Qual Assur* 22: 366-381.

Citation: Ghasoub R, Zaidan M, Al-Yafie S, Al-Siyabi K, Radwan Y, et al. (2017) Preliminary Study of Patients' Perceptions and Satisfaction in Outpatient Pharmacies at the Cancer and Heart Centres in Qatar. *J Appl Pharm* 9: 254. doi: [10.21065/1920-4159.1000254](https://doi.org/10.21065/1920-4159.1000254)