

# Patients' satisfaction regarding family physician's consultation in primary healthcare centers of Ministry of Health, Jeddah

Khalid Bawakid<sup>1</sup>, Ola Abdul Rashid<sup>2</sup>, Najlaa Mandoura<sup>3</sup>,  
Hassan Bin Usman Shah<sup>4</sup>, Waqar Asrar Ahmed<sup>5</sup>, Adel Ibrahim<sup>4</sup>

<sup>1</sup>Deputy Director, Directorate of Health Affairs for Public Health Division, <sup>2</sup>Head of Training, Postgraduate Studies and Research Department, Directorate of Health Affairs for Public Health Division, <sup>3</sup>Head of Research Unit, Directorate of Health Affairs for Public Health Division, <sup>4</sup>Research Department, Directorate of Health Affairs for Public Health Division, <sup>5</sup>Head of IT Department, Directorate of Health Affairs for Public Health Division, Jeddah, KSA

## ABSTRACT

**Introduction:** The current study aims to assess the level of patients' satisfaction and the factors contributing to patients' satisfaction toward family physicians (FPs) consultation, visiting primary healthcare centers (PHCCs) working under Ministry of Health, Jeddah. **Materials and Methods:** In this cross-sectional study conducted in Jeddah from November 1, 2016 to March 1, 2017, we used consultation satisfaction questionnaire and its four subscales with standard cutoffs. These subscales include general satisfaction, professional care, depth of relationship, and length of consultation. Mean scores along with standard deviation of these subscales were measured. Independent sample *t*-test, ANOVA, and multivariate regression analysis were performed to test the association between satisfaction level and predictors. **Results:** Overall, patients' satisfaction was 60%. Around 74% of patients were satisfied with the professional care and 58% with the depth of the relationship. Around 60% of patients need more consultation time with the physicians. Knowledge about the presence of FP in the nearest PHCCs was around 70%. Multivariate regression analysis for the overall high satisfaction showed that the most important predictors of this high satisfaction level are regular visits to a particular FP ( $P < 0.001$ ), distance from the PHCC ( $P = 0.044$ ) and gender of the patient ( $P = 0.027$ ). **Conclusion:** This study concluded that satisfaction with the FP's consultation is acceptable but needs improvement. Lower satisfaction was reported among males, patients living at a distance from PHCC and who had less knowledge about the presence of FP in their nearest PHCC. Such study data are vital for any corrective measures to boost satisfaction in patients attending PHCCs.

**Keywords:** Consultation satisfaction, family physician, length of consultation, patient trust, primary healthcare center, professional care

## Introduction

Over the past two decades, a change in public opinion and their perception about primary health care has been noticed. With all the changes in the society, media projection and advocacy,

it would be unrealistic to expect that health services will be allowed to remain undisputed.<sup>[1,2]</sup> Patients' increasing demand, fiscal restraint, and rising patient load have resulted in debates about the best approach to organize and to deliver primary care.<sup>[2]</sup>

Patients' satisfaction with the medical care relates directly with the physician's practice style.<sup>[3]</sup> Among the inter-personal relationships, the relation between a doctor and a patient

**Address for correspondence:** Dr. Najlaa Mandoura,  
Department of Research, Public Health Division, P.O Box 8780,  
Jeddah 21492, KSA.  
E-mail: najlaamandoura@gmail.com

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is considered the most complex one.<sup>[4]</sup> Complexity in their relationship is often nonvoluntary and requires close cooperation and understanding each other.<sup>[5]</sup> Although the new advancements in the medical field help in the diagnosis and treatment, yet interpersonal communication between a doctor and a patient remains to be the main tool for the exchange of information.<sup>[6]</sup>

Studies show that the two main criteria to assess the doctor–patient successful interaction are: How seriously patients follow doctor's advice and how satisfied the patient feels after the consultation.<sup>[7]</sup> The more information is provided to the patient the more satisfied patient feels and is more likely to cooperate with the treatment showing better compliance.<sup>[1,8]</sup>

Patient's dissatisfaction reported in different studies vary from 11% to 65%.<sup>[7]</sup> The frequency of change in the consulting doctor also gives an idea about patients' dissatisfaction. Some other reasons for dissatisfaction identified in different studies include; doctor being incompetent, giving an inaccurate diagnosis, improper examination and communication style, unsatisfactory treatment given, less duration of consultation, not enough information provided, and disrespect by the doctor.<sup>[5,7]</sup>

Studies have proved that if the physician interrupts the patient early during his presenting complaints, many patients issues could be missed.<sup>[9]</sup> Similarly, most of the time patient's concerns are neither elicited by the physician, nor the patient discloses them resulting in the increased level of dissatisfaction of the patient.<sup>[10]</sup> A continuous longitudinal association between doctors and patients could promote interpersonal trust.<sup>[11]</sup> Ultimately, this continuity of care can increase patients' satisfaction.<sup>[12]</sup> This can be hypothesized pertaining to the above statements that those who see their regular doctor would also be more satisfied.

Although we have a good number of family physicians (FPs) working in the Kingdom, their presence and exact role in the primary healthcare centers (PHCCs) is not recognized by the patients. Only a few studies have been conducted about the patients' satisfaction in our primary care setups, especially those getting consultation from a FP.<sup>[13]</sup> This study was an effort to find out if the general population has the knowledge about the presence of FPs in their area, the reasons and factors leading to patients' dissatisfaction during their consultation with FPs and to find out ways to improve their satisfaction level.

## Materials and Methods

A cross-sectional interview-based survey was conducted in Jeddah PHCCs having FP working under Ministry of Health (MOH). Study Population included patients coming to these PHCCs after their consultation by the FP. FP are specialist/consultant doctors who have finished and cleared exit examination after 4 years of postgraduate residency training in family medicine. Study duration included 4 months of data collection and analysis from November 1, 2016 to March 1, 2017.

We selected the PHCCs using stratified random sampling technique. Jeddah PHCCs are divided into five geographical regions. We randomly selected three centers from each region. We interviewed all the patients present in that facility on the day of data collection after their consultation with the FP. Based on the results of a pilot study, the mean satisfaction calculated was 71% with a standard deviation of 4. Using these figures keeping the level of significance at 95%, desired precision to be 0.5 the calculated sample size was 246. We approached 268 patients, but 19 patients did not give consent, so a response rate of around 93% was noted.

A validated close-ended structured questionnaire translated in the local language with slight modification was used; adopted from consultation satisfaction questionnaire (CSQ) used in different studies.<sup>[13-16]</sup> The CSQ was translated from English into Arabic, by two bilingual professional translators who understood the content. The translated instrument was then back-translated into English by two other bilingual translators and compared to its original version. This procedure ensured clarity and comprehensibility of items. Any discrepancies in comparison were discussed, and a few minor adjustments were applied after pilot-testing. Patients coming to these PHCCs were approached and interviewed. Data were collected and compiled in soft and hard copies. The main outcome variables were the four subscales of CSQ (i.e., general satisfaction, professional care, depth of relationship, and length of consultation) along with the overall satisfaction.

Data analysis was performed using SPSS 22 (IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.). Categorical variables were used for descriptive epidemiology. Bivariate analysis using independent sample *t*-test and ANOVA with *post hoc* was performed to include statistically significant variables in the multivariate linear regression analysis. Multivariate regression was performed to determine the factors responsible for satisfaction. For each component of CSQ subscale (i.e., dependent variable) along with the overall satisfaction, a multiple regression analysis was undertaken. Mean, median, mode with standard deviation were calculated to analyze numerical variables. Total median scores with interquartile range were calculated as the data were not normally distributed (confirmed by Kolmogorov–Smirnov test).

CSQ, is a reliable and valid tool having four subscales. It has 18 questions, but 2 were omitted to reduce respondent burden.<sup>[13,15]</sup> Responses to each question were invited in a Likert 5-point response format (strongly agree to strongly disagree), and higher scale scores indicated higher satisfaction (0 = minimum, 100 = maximum satisfaction). Using the recommended guidelines, overall satisfaction was determined by adding scores of all the four subscales of CSQ.<sup>[17,18]</sup> The statements on the CSQ are not all worded in the same direction and hence that it is possible for “strongly agree” to indicate satisfaction in some questions and indicate dissatisfaction in others. The calculation of satisfaction takes this into account [Table 1].

The question scores in this report are the means of these ratings for all the respondents to the question.

Inclusion criteria included all the adult patients coming for treatment in PHCCs getting consultation from FP and who were willing to participate. While attendants of patients visiting PHCCs and Patients checked by general practitioner/dentist in PHCC were excluded from the study. General practitioners are simple under-graduate doctors with no postgraduate training in family medicine. Ethical approval was taken from the ethical committee of MOH and Directorate of Health Affairs Jeddah (H-02-J-002). Before the interview, informed consent was taken from the patient and confidentiality of data was ensured.

### Results

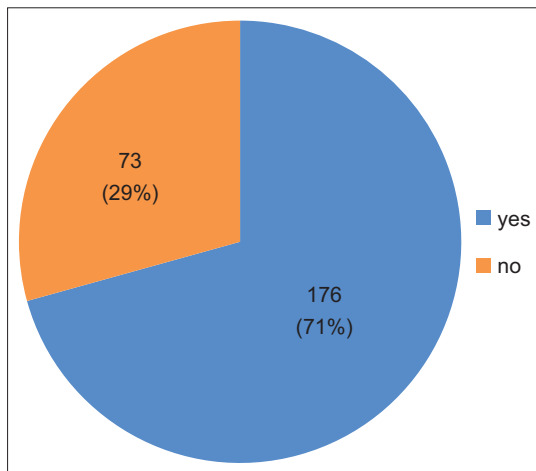
The study population consisted of 249 patients, interviewed after their consultation with the FP present in the PHCCs. Mean age of the patients was 36 ± 14.8 years, majority (96%) living in the urban areas near to the PHCCs. Other demographic data are given in Table 2.

Patients' preference of visiting the same PHCC, consulting the same FP every time, indicates his trust on the doctor. Table 3 describes the patient preferences of healthcare access.

Knowledge about the presence of FP consultant in the nearest PHCC was adequate (70.6%) as shown in Figure 1.

Overall, 59.30% (±8.7) patients were satisfied with their consultation with the FPs. Most of the patients (74%) were satisfied with the professional care provided by the FP. Around 40% of the patients were not satisfied by the depth of relationship with the FP. The majority (59.5%) need more time for consultation with the FP [Table 4].

Multivariate regression analysis for the overall high satisfaction showed that the most important predictors of high satisfaction level were regular visits to a particular FP ( $P < 0.001$ ), distance from the PHCC ( $P = 0.044$ ) and gender of the patient ( $P = 0.027$ ) [Table 5].



**Figure 1:** Patient's knowledge about availability of family physician in their nearest primary health care

Regular visit to a particular FP shows how much the patient trusts that doctor and is satisfied with his diagnosis/treatment [Table 5].

**Table 1: Mean rating scores**

	Positive question score (Question number: 1, 2, 3, 4, 6, 9, 10, 12, 13, 14, 15) (%)	Negative question score (Question number: 5, 7, 8, 11, 16) (%)
1. Strongly agree	100	0
2. Agree	75	25
3. Neutral	50	50
4. Disagree	25	75
5. Strongly disagree	0	100

**Table 2: Demographic profile (n=249)**

Variable	n (%)
Gender	
Male	92 (36.9)
Female	157 (63.1)
Resident	
Urban/city	240 (96.4)
Rural	9 (3.6)
Marital status	
Single	41 (16.5)
Married	158 (63.5)
Divorced	30 (12.0)
Widow	20 (8.0)
Education	
No formal education	22 (8.8)
Primary/intermediate	59 (23.7)
Secondary/university	148 (59.4)
Diploma/masters/PhD	20 (8.0)
Distance from PHC	
Near	168 (67.5)
Middle	65 (26.1)
Far	16 (6.4)

PHC: Primary Health Center

**Table 3: Patients preferences of health care access (n=249)**

Variable	n (%)
Particular health care setup where you go	
Yes	201 (80.7)
No	48 (19.3)
Regular visits to a particular FP	
Yes	117 (47.0)
No	132 (53.0)
How long going to same doctor	
<1 year	45 (18.1)
1-3 years	62 (24.9)
4-6 years	18 (7.2)
>6 years	15 (6.0)
Not going regularly to same doctor	109 (43.7)
Important to go to the same doctor	
Yes	231 (92.8)
No	18 (7.2)

FPs: Family physicians

The more the distance from the PHCC, the lower the satisfaction level ( $P < 0.001$ ). Females were more satisfied by their consultation with FPs [Table 5].

## Discussion

This survey indicated the level of satisfaction of patients after their consultation with the FP. The findings of this study gave the insight to identify the factors affecting their satisfaction. The overall satisfaction identified in our study was around 60%, which can be compared with some previous studies conducted in Saudi Arabia and neighboring countries where the satisfaction ranged from 60% to 90%.<sup>[19-21]</sup>

The strongest predictors of patient consultation satisfaction in our study were found to be consulting the same FP every time, number of years the patient has been consulting the same doctor, distance from the PHCC and patients' gender. Patients who were visiting the same FP regularly had high levels of trust and are satisfied by their regular FP. Similar findings were seen in studies conducted in the USA and UK<sup>[13]</sup> where trust in the doctor was identified to be the foremost factor for patients' satisfaction.

Our study findings showed that most patients highlighted poor communication being a major factor affecting depth of relationship rather than physician's professional competency. Interpersonal communication is an important component of consultation needs improvement. In contrast to this, in another study conducted in Riyadh PHCCs, depth of relationship and communication skills were better as compared to our findings.<sup>[22]</sup>

Studies prove that if physicians allow sufficient time for exchanging information (a consultation of at least for 10 min), the

satisfaction level can be enhanced.<sup>[12,13,16]</sup> Studies conducted in Australia<sup>[7]</sup> and Canada<sup>[9]</sup> show that a better satisfaction score can be achieved by improving the depth of relationship simply by giving more time, informing them in detail about their disease and involving patients in decision making. Swenson *et al.*<sup>[23]</sup> showed that patients favor patient-centered detailed communication which was not found in our study. Our findings indicated a low score both in length of consultation and depth of relationship showing a clear patient's dissatisfaction. More OPD patients load and less availability of FPs in our PHCCs forces doctors to check more than 10 patients in 1h. Physician sensitivity to patients' satisfaction can be increased by training them in communication skills.<sup>[15]</sup>

The study demonstrated that there was no significant difference between the consultation satisfaction of educated and uneducated patients. These findings are not in accordance with the findings of similar studies conducted in Kuwait<sup>[20]</sup> and Saudi Arabia.<sup>[22]</sup> Gender of the physician also has an impact on the consultation satisfaction. Studies conducted in different settings of USA<sup>[15]</sup> and Switzerland,<sup>[16]</sup> highlighted the different behavior styles of male and female physicians. In all these settings, male physicians got somewhat more credit for being patient-centered than female physicians. However, our results did not match these findings, where female FP were more patient-centered. This may be due to the presence of less male FP in the PHCCs. A study conducted in the UK showed no difference in levels of satisfaction with the sex of the doctor.<sup>[24]</sup>

Findings of our study showed that male patients indicated less satisfaction with the consultation duration. It may be that the male patients are more critical of these aspects of services or because of our cultural barriers female FP are not giving appropriate time to them. Similarly, prominent male dissatisfaction was noted in a study conducted by Baker.<sup>[24]</sup> Distance from the health center has its effect on patient's satisfaction. The longer the distance patient has to travel, the lower the satisfaction. The study findings also indicated the distance from PHCC affecting the satisfaction level which is similar to studies conducted in other parts of Saudi Arabia and North Cyprus.<sup>[14,22]</sup>

Knowledge about the presence of FP can improve the overall patients' satisfaction. If a patient knows that a competent specialist is present in the nearest PHCC, he may trust him more. Pearson and Raeke.<sup>[11]</sup> and Mainous *et al.*<sup>[12]</sup> identified that the presence and availability of a physician in the nearby PHCC can improve a patient's trust on him. Information regarding the presence of FP in neighboring PHCC needs to be improved in our study population

A limitation of the present study was that we did not calculate the physician's burnout (such as emotional exhaustion, and depersonalization) and its association with the patients' satisfaction level; which can affect satisfaction. Another limitation can be CSQ being prone to halo-effects, that is patients' evaluations may be based more on familiarity, acquaintance and overall liking for the doctor than on specific consultation processes.<sup>[12,17]</sup> Similarly, patients are not well-placed to judge a doctor's technical

**Table 4: Patients' satisfaction status**

Satisfaction subscales	Mean±SD	Median	Range	Percentile	
				25 <sup>th</sup>	75 <sup>th</sup>
Total overall satisfaction	59.30±8.7	58.33	32.9-86.4	53.7	63.9
General satisfaction	63.98±11.3	66.66	8.3-91.6	58.3	70.8
Professional care	74.18±14.6	75.00	16.6-100.0	66.6	83.3
Depth of relationship	58.47±12.6	60.00	20.0-95.0	50.0	65.0
Length of consultation	40.56±21.3	37.50	0.0-87.5	25.0	50.0

SD: Standard deviation

**Table 5: Multivariate regression model for overall satisfaction**

Variable	Standardized coefficient (B)	t	P	95% CI	
				Lower bound	Upper bound
Constant	65.09	16.606	<0.001	57.35	72.84
Gender (female)	0.169	2.234	0.027	0.380	6.185
Distance from PHC	-0.151	-2.031	0.044	-5.032	-0.069
Do you visit regularly to a particular FP	-0.313	-4.153	<0.001	-8.958	-3.183

R<sup>2</sup>=0.171. Excluded variables: Urban or rural resident, information about FP, important to see the same doctor, FP gender, how long seeing the same doctor. CI: Confidence interval; FPs: Family physicians; PHC: Primary Health Center

competence. It is therefore logical when designing such study to include both technical and human outcomes. The clinical expertise in making a diagnosis, managing the emergencies and procedural skills were not assessed in the present study, which is an important factor contributing to patient's satisfaction.

## Conclusion

This study concludes that satisfaction with the FP working in PHCCs is adequate but needs improvement. Lower satisfaction was reported among males, patients living at a distance from PHCC and who had less knowledge about the presence of FP in their nearest PHCC. These factors need to be further studied in depth. Such study data is vital for any corrective measures to be taken to boost satisfaction in patients visiting PHCCs. Increasing the number of FPs, the length of the consultation time, training the FP in consultation skills, regular feedback to FP by videoing the consultation using Pendleton's rules may improve the patients' satisfaction in future. Upcoming studies should cover patients' satisfaction keeping in the loop the other parameters such as support services, physician's burnout and workforce at PHCCs.

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## Conflicts of interest

There are no conflicts of interest.

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