Patient satisfaction with services at the Family Medicine Employee Clinic in a tertiary hospital in Riyadh

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Abstract
Background: Patient satisfaction reflects the healthcare quality of the facility. Therefore, it is important to determine satisfaction level of the patient satisfaction in order to improve services' quality provided to patients. Aim: to assess the satisfaction level of patients at the Family Medicine Employee Clinic at a tertiary hospital in Riyadh, Saudi Arabia. This study is a cross-sectional that included 224 patients. Method: The study was conducted in King Fahad Medical City at the Family Medicine Employee Clinic between March and December 2019. Self-administered questionnaires were used to gather the data. The questionnaire included questions regarding the demographics of patients and questions to examine their satisfaction with the services provided by the clinic. SPSS version 21 was used for data analysis. Results: The study comprised 90 patients, 71.1% of which were female; 77.8% of participants lived in Riyadh; 92.2% of patients were in the age range of 25–75 years; 51.1% were single; 56.7% had income lower than 10,000 SR; 63.3% had college education; and 95.6% were employees of King Fahd Hospital. The mean ± SD of satisfaction was determined to be at 8.6 ± 1.7. There was a significant inverse correlation between income and satisfaction (P = 0.03). Conclusion: Patients reportedly showed high levels of satisfaction, especially regarding the experience of nurses, ease of registration and making appointments, treatment by receptionists, and cleanliness of clinics. The results of the survey reflect the effectiveness and efforts of the employees of the clinic.

Keywords: Family medicine, patients, satisfaction, services

Introduction
Patient satisfaction is defined as the level of congruency between expectations of patients regarding ideal care and their perception of the actual care they receive. Patient satisfaction is deemed a multidimensional aspect, representing a vital key sign for healthcare delivery quality. Patient satisfaction is accepted globally as a factor which is required to be evaluated continuously for the good functioning of the healthcare system. Patient satisfaction is also determined to be associated with better patient compliance to their treatment plans, which improves the continuity of care, hence achieving better health outcomes.

Several factors may affect patient satisfaction, including demographics, structure, complexity of administrative procedures in hospitals, and hospital staff. The characteristics of the healthcare delivery system also play vital roles in the satisfaction of patients, such as availability, accessibility, equity, and affordability.

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Patient satisfaction is an important requirement for the clinical and financial success of a healthcare organization of any specialty.\[^5]\] Satisfaction of patients is also considered essential in monitoring the quality of care of the hospital in relation to services and costs, so patient satisfaction surveys are essential to a dynamic healthcare industry.\[^5]\] Patient satisfaction can be quantified using several measuring factors that patients report, and evaluation of these results can help in implementing new strategies and programs to further improve the satisfaction of patients, which, in turn, can lead to obtain better outcomes.\[^6,7]\] Patient satisfaction can be evaluated through several aspects, including services provided by employees, general appearance, quietness, waiting time, and cleanliness.\[^8]\]

Recently, Saudi Arabia has witnessed fast civilization and social and economic changes, resulting in an increased demand and expectation for high-quality healthcare services.\[^8]\] Patient satisfaction is considered a necessary component for measuring health outcomes and care quality in developing and developed countries; this further constitutes a significant indicator of the quality of the healthcare provided.\[^9]\]

Multiple studies have been conducted, both globally and locally, to investigate the general satisfaction of patients toward services provided by primary care centers and tertiary hospital clinics. The satisfaction level regarding the primary health care (PHC) centers services in the Al-Baha region in 2018 was determined to be high, indicating the good care provided by health facilities in the area, where male sex and higher education were related to higher satisfaction level. The factor with the lowest satisfaction level was associated to communication.\[^10]\]

In Riyadh in 2006, a study was conducted to assess the level of patient satisfaction with services of PHC affiliated to the Riyadh Military Hospital (RMH), and the results showed that the level of satisfaction was relatively low. The findings were able to identify the areas which need improvement, and these included continuity and accessibility of care.\[^9]\]

In researches performed in the Gulf region to estimate patient satisfaction with PHC services between 2000 and 2003, the total satisfaction ranged from 43 to 57% in the United Arab Emirates\[^11]\] and 49% in Kuwait.\[^12]\]

The previous studies were conducted to assess patient satisfaction levels in PHC settings, but no study has reported patient satisfaction regarding tertiary hospitals. Services provided by tertiary hospitals are considered to be more significant than those provided by primary care centers, as most facilities are available. Therefore, the assessment of satisfaction of patients toward services provided by the family medicine clinic is an indicator of the healthcare services’ quality at the hospital. This study was conducted to investigate the level of patient satisfaction among patients of the Family Medicine Employee Clinic at a tertiary hospital in Riyadh.

### Methods

This study is a cross-sectional; it was done among patients at the Family Medicine Employee Clinic at King Fahad Medical City (KFMC) in Riyadh, Saudi Arabia.

This study was performed using pre-tested questionnaires from a previous study conducted in Al Majmaah.\[^9]\] The questionnaire was randomly distributed in the Family Medicine Employee Clinic, and samples were then selected according to the inclusion criterion, that is, employee patients aged between 25 and 75 years old. The exclusion criteria were as follows: non-employee (family), less than 25 years, or older than 75 years.

The questionnaire required the following patient data: sex, residence, age, education level, marital status, income level, and employment. The questionnaire included 20 statements: reception staff treat me well; the registration method was easy and clear; booking the appointment was easy and clear; it was easy to find my way to the clinic and to get out; the nurses were skilled in taking blood samples and vital signs; I didn’t have to wait long to see the doctor; doctors and nurses ensured my privacy; I had enough time to discuss my medical problems with the doctors/nurses; doctors and nurses explained things in a clear way; I am satisfied with the medical management I received; I always get the health information I need in the clinic; the services that I need from the clinic are always available; I was treated with respect during my visit; the clinic was clean; the doctor got me involved in the management plan; the doctor provided the information clearly regarding medication prescribed including dosage, side effects, and duration; the medications prescribed were available in the pharmacy; the pharmacist provided the medication usage and information clearly; I am satisfied with the facilities in this clinic; and follow-up scheduling was easy and clear. The Ethical approval was obtained on 23 May, 2019, IRB00010471.

The patients were to answer based on the choices as follows: strongly agree, agree, neutral, disagree, or strongly disagree. Participants provide an informed consent, and confidentiality was ensured by keeping participants’ data secure and private. Participants had the right to withdraw any time, and no rewards were given to participants. The institutional review board of the KFMC has approved this study.

Based on the previous studies conducted in Al Majmaah,\[^9]\] we used an appropriate statistical formula to estimate the minimum sample size. The sample size was inflated by 10% to account for non-responses, incomplete responses, and refusals (22.70; \(N = 250\)).

### Data Analysis

SPSS software, version 21 was used to analyze the collected data. Descriptive statistics were used for continuous variables (mean and median) and categorical data (proportion). Measuring association by odds ratio was used to quantify the association between categorical variables. Multivariate analysis (logistic regression) was used to identify the independent variable related
to study outcome variable. \( P < 0.05 \) and 95% confidence interval were used to indicate the statistical significance and precision of the results.

## Results

Our sample included 90 patients who sought different medical services. All patients were able to complete the questionnaire to assess their experiences in the outpatient clinic. Table 1 shows the participants’ demographics. Among the participants, there were more females than males (64/90, 71.1%). The majority of participants (70/90, 77.8%) lived in Riyadh, and the most common age group (83/90, 92.2%) was 25–75 years old. Almost half the participants were single (46/90, 51.1%), and more than half (51/90, 56.7%) reported income less than 10000 SR.

The participants’ responses to the questions are shown in Table 2. The highest level of satisfaction was regarding patients’ experiences of nurses during the measurement of vital signs (50%), whereas the lowest satisfaction was regarding the clinic being clean (36.4%).

The level of satisfaction ranged from 1 to 10, with mean ± SD of 8.6 ± 1.7. The correlations between satisfaction and different variables were examined and are shown in Table 3. All variables showed no significant correlation with satisfaction; only income was a significant factor: patients with a higher income level had lower agreement on the hospital procedures.

## Discussion

The mean score of satisfaction of participants was 8.6 out of 10, which indicates a high level of satisfaction. The highest satisfaction levels were related to experience of nurses during the measurement of vital signs, registration to clinics, the receptionists’ treatment of patients, and making an appointment. Meanwhile, the lowest levels of satisfaction were found to be related to the cleanliness of the clinic, management plan sharing, and pharmacists explaining prescribed drugs.

On a study published in 1993, which was conducted to assess the primary health patient satisfaction in Saudi Arabia, moderate satisfaction for services was reported, and the authors recommended that programs be developed in order to address different aspects of primary healthcare.\[13\] The present study showed improvement in satisfaction levels compared to these old findings, and this reflects the improvement in services provided to patients. However, the results from several hospitals and medical centers in different areas should be declared to measure improvements. A study conducted at RMH, published in 2008, showed that the overall satisfaction was at 64.2%\[14\].

Another study conducted in southern Saudi Arabia\[15\] showed that there was high level of satisfaction among patients in terms of healthcare services, which was found to be in agreement with our findings. It should be noted that this study was published recently, in 2018, and this reflect the improvements made in healthcare settings. Another study from Majmaah City also reported a high satisfaction level (82%). Furthermore, the study showed that the most stated reason behind dissatisfaction was unsuitable buildings (29%).\[16\] In Jordan, a previous study determined that the mean total satisfaction was only at 4.36%\[14\], which was much lower than our findings. A study from Kuwait found a high satisfaction level among participants; however, dissatisfaction toward some aspects of the services was indicated.\[17\]

An Indian study was also performed in order to assess patient satisfaction in terms of services obtained from a tertiary care hospital in rural Haryana. The study has reported satisfaction regarding various aspects. A high satisfaction rating was reported from the Maharishi Markandeshwar Institute of Medical Sciences and Research, regarding the patient–provider relationship, medical care, and information and support, but the satisfaction level was deemed low in terms of organization care and cost. The study has failed to report the overall satisfaction. Cleanliness and waiting times were the most commonly stated reasons for high levels of satisfaction.\[18\]

In London, a study was also conducted to determine patient satisfaction with care provided at a family medicine teaching
Another study in Al-Baha, Saudi Arabia, demonstrated that male gender and high education level were associated with higher satisfaction levels, which was in contrast to our findings. Another study in Majmaah City, Saudi Arabia, found that there was a significant association between patient satisfaction and education level.

Meanwhile, a study in Kuwait found that both gender and education level were significantly associated with patient satisfaction; this was in contrast to our study as we found no impact of gender or education level on satisfaction. Another study from Kuwait reported that male gender and individuals who had completed only primary school showed the highest score of overall satisfaction. Also, a previous study from London has showed that older patients tended to be more satisfied, whereas those who waited longer for appointments were less satisfied.

**Conclusion**

A high satisfaction level was reported among patients regarding the services they received from the Family Medicine Employee Clinic. Further studies are recommended in order to examine other factors associated with patient satisfaction and to gather suggestions from patients to increase their satisfaction with the services.

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Nil.

**Conflicts of interest**

There are no conflicts of interest.

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**Table 2: Participants’ answers to the satisfaction questions**

| Question                                                                 | Strongly agree [n, %] | Agree [n, %] | Neutral [n, %] | Disagree [n, %] | Strongly disagree [n, %] |
|-------------------------------------------------------------------------|-----------------------|--------------|----------------|------------------|-------------------------|
| Receptionist has treated you with all respect                           | 42 (46.7)             | 11 (12.2)    | 4 (4.4)        | 8 (8.9)          | 25 (27.9)               |
| Registration to clinics was easy and simple                             | 43 (47.8)             | 10 (11.2)    | 5 (5.5)        | 5 (5.5)          | 27 (30)                 |
| Taking an appointment was an easy and simple procedure                  | 42 (46.7)             | 12 (13.3)    | 3 (3.3)        | 7 (7.8)          | 26 (28.9)               |
| It was easy to reach clinic and get out of it                           | 36 (40.4)             | 12 (13.5)    | 6 (6.7)        | 9 (10.1)         | 26 (29.2)               |
| Nurses were experienced during vital signs measurements                  | 44 (50)               | 9 (10.2)     | 2 (2.3)        | 4 (4.5)          | 29 (33)                 |
| Waiting time in clinics                                                 | 24 (27)               | 13 (14.6)    | 13 (14.6)      | 16 (18)          | 23 (25.8)               |
| Health staff maintain your privacy                                      | 40 (45.4)             | 11 (12.5)    | 4 (4.3)        | 3 (3.4)          | 30 (34.1)               |
| You discussed your medical issue easily with medical staff              | 36 (40.4)             | 14 (15.7)    | 7 (7.9)        | 3 (3.4)          | 29 (32.6)               |
| Medical staff delivered information clearly                              | 36 (40.9)             | 18 (20.4)    | 3 (3.4)        | 4 (4.5)          | 27 (30.7)               |
| Your satisfaction regarding management plan                             | 31 (34.8)             | 17 (19.1)    | 9 (10.1)       | 7 (7.9)          | 25 (28.1)               |
| You got needed information during your visit                            | 30 (33.7)             | 18 (20.2)    | 9 (10.1)       | 3 (3.4)          | 29 (32.6)               |
| Supplies were available                                                  | 28 (31.5)             | 20 (22.5)    | 9 (10.1)       | 5 (5.6)          | 27 (30.3)               |
| Medical staff were respectful                                           | 37 (41.6)             | 15 (16.8)    | 3 (3.4)        | 4 (4.5)          | 30 (33.7)               |
| Clinics are clean                                                       | 41 (46.6)             | 11 (12.5)    | 3 (3.4)        | 1 (1.1)          | 32 (36.4)               |
| You shared in making decision of management plan                        | 37 (41.6)             | 13 (14.6)    | 6 (6.7)        | 1 (1.1)          | 32 (36)                 |
| Pharmacist explained each drug prescribed including dose and side effects| 35 (38.9)             | 13 (14.4)    | 8 (8.9)        | 3 (3.3)          | 31 (34.4)               |
| You dispensed drugs easily from pharmacy                                | 29 (32.6)             | 12 (13.5)    | 13 (14.6)      | 5 (5.6)          | 30 (33.7)               |
| Pharmacist explained how to use drug clearly                            | 32 (36)               | 16 (18)      | 6 (6.7)        | 8 (9)            | 27 (30.3)               |
| General satisfaction from medical service                               | 34 (38.2)             | 17 (19.1)    | 6 (6.7)        | 3 (3.4)          | 29 (32.6)               |
| It was easy to book for revisit                                         | 37 (43)               | 11 (12.8)    | 6 (7)          | 4 (4.6)          | 28 (32.6)               |

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**Table 3: Correlations between satisfaction and different variables**

| Variables                  | Test/R | P     |
|----------------------------|--------|-------|
| Gender                     | -0.47  | 0.6   |
| Marital status             | 0.1    | 0.6   |
| Education level            | 0.05   | 0.2   |
| Age                        | 0.02   | 0.3   |
| Income                     | -2.23  | 0.03  |
| Residence                  | 0.03   | 0.9   |
| Employment                 | -1.01  | 0.3   |

This study reported that patients were generally satisfied with the care they received, and the overall satisfaction level was at 88%. Points of dissatisfaction were related to wait times for appointments and continuity with patients’ usual doctors. Furthermore, a study from Wuhan, China, has also evaluated the satisfaction levels of patients and medical staff regarding healthcare services in the city’s public hospitals, wherein the mean patient satisfaction was determined to be at 65.82%, reflecting the average satisfaction among patients. The overall satisfaction evaluation of medical staff was average.

By examining the factors affecting the level of satisfaction, the present study showed that income was inversely and significantly associated with the level of satisfaction, where patients with higher incomes reported significantly lower satisfaction levels. Other variables, including gender, marital status, education level, age, residence, and employment, were determined to have no association with the satisfaction level. In a study conducted at RMH, it was found that older age and lower education level were associated with higher satisfaction.
References

1. Qadri S, Pathak R, Garg P. An assessment of patients satisfaction with services obtained from a tertiary care hospital in rural Haryana. Int J Collab Res Intern Med Public Health 2012.

2. Mohamed E. Patients satisfaction with primary health care centers services, Majmaah, Kingdom of Saudi Arabia. Int J Health Sci 2005;9:159-65.

3. Sanchez-Menegay C, Hudes ES, Cummings SR. Patients 'expectations and satisfaction with medical care for upper respiratory tract infections. J Gen Intern Med 1992;7:432-4.

4. Calnan M, Katsouyiannopoulos V, Ovcharov VK, Prokhorskas R, Ramic H, Williams S. Major determinants of consumer satisfaction with primary care in different health systems. Fam Pract 1994;11:468-78.

5. Alaloola NA, Albedaiwi WA. Patient satisfaction in a Riyadh tertiary care centre. Int J Health Care Qual Assur 2008;21:630-7.

6. Kincey J, Bradshaw P, Ley P. Patients' satisfaction and reported acceptance of advice in general practice. J R Gen Pract 1975;25:558-66.

7. Ahmad I, Din S. Patients' satisfaction From the health care services. Gomal J Med Sci 2010;8:95-7.

8. Al-Sakkak MA, Al-Nowaiser NA, Al-Khashan HI, Al-Abdulbunabi AA, Jaber RM. Patient satisfaction with primary health care services in Riyadh. SMJ 2008;29:432-6.

9. Mohamed EY, Sami W, Alotaibi A, Alfurag A, Almutairi A, Alanzi F. Patients' satisfaction with primary health care centers' services, Majmaah, Kingdom of Saudi Arabia. Int J Health Sci 2015;9:163-70.

10. Owaidh AO, Atiah AA, Abadi AS, Ali AM, Abdullah AM, Abdullah AA, et al. Patients' satisfaction with health care services in Southern Saudi Arabia. Egypt J Hosp Med 2018;72:3857-60.

11. Margolis SA, Al-Marzouq S, Revel T, Reed RL. Patient satisfaction with primary health care services in the United Arab Emirates. Qual Health Care 2003;12:241-9.

12. al-Doghaither AH, Abdelrhman BM, Saeed AA. Patients'satisfaction with physicians'services in primary health centers in Kuwait City, Kuwait. J R Soc Health 2000;120:170-4.

13. Mansour AA, Al-Osimy MH. A study of satisfaction among primary health care patients in Saudi Arabia. J Commun Health 1993;18:163-73.

14. Barghuti F, Abu-Moghi F, Khalaf I. Patient satisfaction with health care services provided at the Family Medicine Clinic at Jordan University Hospital. Dirasat Med Biol Sci 2005;32:52-65.

15. Al-Eisa IS, Al-Mutar MS, Radwan MM, Al-Terkit AM, Al-Eisa I. Patients' satisfaction with primary health care services at capital health region, Kuwait. Middle East J Fam Med 2005;3:10-6.

16. Wetmore S, Boisvert L, Graham E, Hall S, Hartley T, Wright L, et al. Patient satisfaction with access and continuity of care in a multidisciplinary academic family medicine clinic. Can Fam Phys 2014;60:e230-6.

17. Meng R, Li J, Zhang Y, Yu Y, Luo Y, Liu X, et al. Evaluation of patient and medical staff satisfaction regarding healthcare Services in Wuhan Public Hospitals. Int J Environ Res Public Health 2018;15:769.

18. Alotaibi M, Alazemi T, Alazemi F, Bakir Y. Patient satisfaction with primary health-care services in Kuwait. Int J Nurs Pract 2013;21:249-57.