PATIENTS’ SATISFACTION WITH PRIMARY HEALTH CARE CENTERS SERVICES IN KUWAIT CITY, KUWAIT

Abdullah H. Al-Doghaither, PhD, Badreldin M. Abdelrhman, PhD, Abdalla A.W. Saeed, MD, Abdullah A. Al-Kamil, MCommH, Mohieldin M. Majzoub, MD
College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia

Background: Assessment of patient satisfaction offers a way of optimizing health status and prevents waste of medical resources. The direct measurement of patient satisfaction is a new phenomenon in Kuwait.

Objective: Assess patient satisfaction with respect to primary health care services and study any patterns of association of sociodemographic variables on the patient satisfaction level.

Methods: The sample consisted of 301 patients selected systematically from five primary health care centers to represent various geographic areas in Kuwait City. Just over 56% of the sample were females, 59% were married, the great majority (70.4%) were government employees, more than 60% had a monthly income of less than 900 dinars.

Results: 56% of the patients were female, 59% were married, and the majority (70.4%) were government employees. More than 60% had a monthly income of less than 900 dinars. The general level of satisfaction was 31.3, and the highest satisfaction was for medical services, followed by the consultation and staff skill.

Conclusion: Some services require medical follow-up until they reach higher levels. Patients require educational programs to achieve the goals of primary health care.

Correspondence to:
Dr. Abdullah H. Al-Doghaither, Department of Community Health Sciences, College of Applied Medical Sciences, King Saud University, P.O. Box 10219, Riyadh 11433, Saudi Arabia
than 900 KD, more than 54% were intermediate and high secondary school graduates, and 37% were university graduates or had advanced degrees. The data was collected by personal interview using structured questionnaire.

**Results:** The overall mean satisfaction was 3.1 points out of five (62%). The mean satisfaction scores were 3.64, 3.29, 3.08, 3.05, 2.21 for laboratory, pharmacy, radiology, dental and physician services, respectively. The highest mean score for physician services was obtained for communication skills (2.23); for pharmacy services, the availability of medicine (4.01); for laboratory services, the availability of lab materials (3.73); for radiology services, the waiting time for x-ray (3.60); and for dental services, the adequacy of dentists (3.27). The results indicated that gender, income, marital status and occupation were the most consistent demographic predictors of satisfaction, with females, those with lower income, lower education levels and the unemployed having higher mean satisfaction scores.

**Conclusion:** There is a need for corrective intervention in some service areas and for an educational program to inform patients of the objectives and limitations of primary health services.

**Key Words:** Primary care, satisfaction, sociodemographics, Kuwait

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**INTRODUCTION**

Primary Health Care is defined by the World Health Organization as essential health care made universally accessible to individuals and families in the community by means acceptable to them. Its objective is to deliver integrated health services. This new system abolished its former health offices, maternal and child health centers and dispensaries, amalgamating their services into health care centers which provide both curative and preventative aspects of care. Studies of patients attitudes towards health services, health personnel and resources constitute important elements in the extent to which the health services have met the consumers’ expectations and needs, and hence can be viewed as a means of judging the degree of their satisfaction with the services. The degree of patient satisfaction can be used as means of assessing the quality of health care and the personnel. It reflects the ability of the provider to meet patients’ needs. Satisfied patients are more likely than unsatisfied ones to continue using health care services, maintain their relationships with specific health care providers, and comply with care regimens. Satisfaction studies have been done mostly in developed countries. In developing countries, such studies are scarce and of a general nature. In the Gulf Region, some studies on satisfaction with ambulatory care were conducted in countries like Saudi Arabia, the United Arab Emirates and Qatar. The authors are not aware of similar published studies for Kuwait. The current study will start the process of evaluation with the hope of delineating areas of strength and weakness in Primary Health Care centers (PHCCs) to pave the way for appropriate planning strategies for improvement. This article is intended to stimulate further research in this area.

**PATIENTS AND METHOD**

This is a facility-based study of the PHCCs in Kuwait City, the capital of Kuwait. The study population consisted of all Kuwaiti patients who visited (PHCCs) in Kuwait City during the study period (September, 1998). Because direct interviews are con-
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sidered to yield the best information and result in a higher response rate from patients, it was selected as the appropriate methodology. The satisfaction questionnaire was based on the standardized Likert scale of 1-5 points; the higher the score, the higher the satisfaction with the service offered. The questionnaire addressed two main components: patients’ sociodemographic (gender, marital status, education, age, income, and job) and general satisfaction with physician, and dental, pharmacy, laboratory and radiology services. The internal consistency of the questionnaire was examined using Cronbach’s alpha. The alpha coefficient was 0.868, which is considered as a good measure for reliability. The study was conducted in five PHCCs randomly selected to represent various geographic areas of the capital, Kuwait City. The sample consisted of 80 patients chosen systematically from each center making a total of 400 patients. Every 10th Kuwaiti patient 18 years old and above who visited the PHCC during the study period was selected. Participation was voluntary and confidentiality was assured to the respondents. Subjects were informed about the study objectives and procedures, and that data collected would be used only for the stated research purposes. The questionnaire was administered by a trained final-year Kuwaiti student in the Health Service Administration Programme of the Department of Community Health Sciences, College of Applied Medical Sciences, King Saud University in Riyadh, who was also available to answer patients’ queries and help illiterate patients. The data was checked manually for completeness.

Analysis of variance using Man-Whitney U-test and Kruskal-Wallis test was carried out to examine the differences on the mean scores of satisfaction within sociodemographic variables. Multiple regression analysis was undertaken, with overall mean satisfaction score being the dependent variable and the sociodemographic characteristics being the independent variable. Summary satisfaction scores were done for all services according to the sociodemographic variables studied. Data was analyzed using SPSS package, version 9.

RESULTS

Data was obtained for 301 patients, a response rate of 75%. The sample was composed of 130 males (44.2%, mean age=31.38 years, range 15-71) and 171 females (56.2%, mean age =31.59, range =15-56). The two groups did not differ significantly in age (P= 0.19). The majority of the patients were married (59.1%), aged less than 50 years (93%). For education, 2.2% reported they did not have formal education, 5.3% were primary school graduates, 54.3% intermediate and high school graduates, and 37% university graduates and beyond. Incomes ranged from less than 450 Kuwaiti

| Items                                     | Mean satisfaction |
|-------------------------------------------|-------------------|
| Physician                                 |                   |
| Communication skills                      | 2.23              |
| Clinical skills                           | 2.21              |
| Satisfying patients’ wishes               |                   |
| Pharmacy                                  |                   |
| Ability to explain (pharmacist)           | 3.12              |
| Convenience of prescription filling       | 3.40              |
| Availability of medication                | 4.01              |
| Conveniently and logically located        | 2.64              |
| Laboratory                                |                   |
| Availability of lab materials             | 3.73              |
| Waiting time for lab results              | 3.54              |
| Adequacy of lab staff                     | 3.63              |
| Radiology                                 |                   |
| Time taken for x-ray                      | 3.60              |
| Equipment condition                       | 2.56              |
| Dental                                    |                   |
| Appointments                              | 3.24              |
| Equipment condition                       | 2.63              |
| Adequacy of dentists                      | 3.27              |

Table 1: Mean satisfaction score for physician, dental, pharmacy, laboratory and radiology services
Table 2: Mean satisfaction score according to patients’ demographic variables

| Variables            | Physicians | Pharmacy | Laboratory | Dentistry | Radiology | Mean  |
|----------------------|------------|----------|------------|-----------|-----------|-------|
| Gender               |            |          |            |           |           |       |
| Male                 | 2.17       | 3.47     | 3.40       | 2.93      | 2.97      | 2.99  |
| Female               | 2.33       | 3.81     | 3.85       | 3.16      | 3.18      | 3.27  |
| Education            |            |          |            |           |           |       |
| Illiterate           | 2.33       | 3.81     | 3.74       | 3.54      | 3.23      | 3.33  |
| Elementary           | 2.11       | 4.03     | 3.84       | 3.67      | 3.44      | 3.42  |
| Intermediate & school| 2.24       | 3.52     | 3.51       | 3.02      | 2.71      | 3.00  |
| University & above   | 2.12       | 3.48     | 3.64       | 2.88      | 2.83      | 2.99  |
| Marital status       |            |          |            |           |           |       |
| Married              | 2.23       | 3.51     | 3.41       | 2.93      | 3.00      | 3.02  |
| Single               | 2.38       | 3.77     | 3.90       | 3.20      | 3.11      | 3.27  |
| Age                  |            |          |            |           |           |       |
| 15-29                | 2.04       | 3.62     | 3.64       | 3.05      | 3.14      | 3.10  |
| 30-49                | 2.21       | 3.59     | 3.60       | 2.99      | 2.98      | 3.07  |
| >50                  | 2.33       | 3.95     | 3.67       | 3.46      | 3.17      | 3.32  |
| Income (KD)+         |            |          |            |           |           |       |
| <450                 | 2.27       | 3.88     | 3.80       | 3.21      | 3.28      | 3.29  |
| <600                 | 2.22       | 3.69     | 3.76       | 3.03      | 3.05      | 3.15  |
| <900                 | 2.24       | 3.44     | 3.39       | 2.81      | 3.02      | 2.97  |
| <900+                | 2.35       | 3.54     | 3.62       | 3.05      | 2.96      | 3.12  |
| Occupation           |            |          |            |           |           |       |
| Government employee  | 2.28       | 3.58     | 3.63       | 3.00      | 3.04      | 3.11  |
| Private              | 2.01       | 3.75     | 3.48       | 3.31      | 3.14      | 3.14  |
| Labor                | 2.64       | 3.68     | 3.86       | 3.10      | 3.14      | 3.28  |
| Student              | 2.41       | 3.68     | 3.46       | 2.69      | 3.12      | 3.07  |
| Unemployment         | 1.89       | 3.88     | 4.05       | 3.46      | 3.29      | 3.31  |

Dinar (KD) for 22.6%, up to less than 900 KD for 27.2%. The majority of the patients (70.4%) were government employees, 9.3% worked in the private sector, 2.3 were laborers, 11% were students and 7% were unemployed. The overall mean satisfaction with all services provided was 3.1 points out of 5 points (62%).

Table 1 shows mean satisfaction scores for physician, dental and allied medical services. The mean satisfaction with physicians’ services was 2.21 points (44.2%), 3.05 (61%) for dental services, 3.29 (65.8%) for pharmacy services, 3.64 (72.8%) for laboratory services and 3.08 (61.6%) for x-ray services. For all the services offered, the lowest mean satisfaction score was obtained for satisfying patients’ desires by physicians (2.18 points, 43.6%) and the highest was for availability of medications in the pharmacy (4 points, 80%).

Mean satisfaction scores for physicians’ and allied medical services according to the demographic variables are shown in Table 2. For all services, a significant difference was observed for all groups. Females were more satisfied (3.27) than males (2.99). Regarding marital status, singles reported a higher level of satisfaction (3.27) than marrieds (3.02). For age, elderly patients showed a higher level of satisfaction (3.32) than other groups. Patients with lower educational levels (illiterate, 3.33; and elementary, 3.42) showed a high level of satisfaction. Low-income groups showed higher levels of satisfaction than higher income groups. For occupation, the unemployed exhibited the highest level of satisfaction (3.31). It should be noted that physicians’ services exhibited the lowest mean satisfac-
tion scores for all variables.

Table 3 shows the results of multiple regression of sociodemographic variables, predictors of satisfaction with services provided. The first variable to influence mean score satisfaction was gender. Females had higher mean satisfaction scores (0.189) than males. The second variable to influence satisfaction was marital status, with singles reporting higher mean satisfaction scores (0.174) than married. The third variable was income, with lower income levels predicting higher satisfaction; and the fourth variable was occupation, with unemployment predicting higher satisfaction. Age and education were not significant predictors for satisfaction with services provided. The set of independent variables included accounted for 44% of the variation in mean satisfaction.

**Table 3: Standardized regression coefficient of demographic variables on mean satisfaction scores for physicians’ and allied medical services**

| Variable     | Regression coefficient |
|--------------|------------------------|
| Sex          | 0.189*                 |
| Marital status| 0.174†                |
| Age          | -0.058                 |
| Education    | 0.026                  |
| Income       | 0.129†                 |
| Occupation   | -0.118†                |

*significant at 0.01
†significant at 0.05

**DISCUSSION**

The measurement of patient satisfaction has become a common way to elicit patients’ views about the health care delivered, and hence has received considerable attention in recent years. This is the age of health care consumerism and researchers are compiling hard data on outcome and consumer satisfaction. The focus of all these activities is the patient.8,9 This study is an effort to evaluate patient satisfaction for a better patient focus. The overall satisfaction score in Kuwait City was 62%, with individual scores ranging from 61 to 72.8% for all services offered, except physician services which scored only 44.2%. These satisfaction scores are comparable to similar studies conducted in Riyadh and Jeddah cities, Saudi Arabia10,11 but are much lower than the reported findings of many worldwide studies which ranged from 61 to 97%.6,7,12,13

It is difficult to interpret these wide differences in range without adequate information about many aspects, such as study methodology and populations; health systems; characteristics, sociocultural values and attitudes; and whether primary care training of health team is being regularly performed.14

The lowest satisfaction score in this study was for physician services. This needs urgent examination. Physicians are the traditional leaders of the health team and their performance and patients’ satisfaction with them is crucial to utilization and success of the services provided. Physicians may be overburdened by a high patient load, administrative duties, and other commitments which may affect their performance.

Studies have shown that about 36% of the patients’ complaints were related to physicians’ attitude, conduct and communication.15

About two thirds of the patients in a study in neighboring Saudi Arabia thought that careful listening by the doctor to his patients’ complaints is an important characteristic for an ideal physician.4

Other studies have shown that physicians’ communication skills and the length of time they spend talking, explaining and responding to their patients’ queries and offering reassurance, support, and involving patients in decision-making, and discussing test results and findings from physical examinations were strong and important correlates of patients’ satisfaction.16-18

Possible measures for boosting patients’ satisfaction with physicians’ services in-
clude training of physicians in communication skills following their undergraduate education. Post graduate training in communication skills and their psychological aspects tend to increase open discussion about feelings and emotions and may also produce greater physician sensitivity to patients’ satisfaction.

The low mean satisfaction score for satisfying patients’ desire to undergo lab tests and for offering request referral to hospital is understandable. Patients’ desires, particularly for laboratory tests and referral to secondary care, may not be professionally justified. Patients need to be educated about the objectives and limits of primary health care and be assured that if need arises all efforts will be done to offer the most appropriate professional care at the primary or secondary level. Patients were more satisfied with pharmacy services, particularly the availability of drugs. Kuwait, a rich country, appears to be successful in providing necessary drugs free of charge to all Kuwaiti citizens. This is comparable to satisfaction with pharmacy services in developed countries, with reported satisfaction of 3.7 points (74%), as found in the USA. Absolute or relative lack of drugs was frequently cited as a cause of dissatisfaction in many studies. The most important concern of patients in Kuwait was for the location of the pharmacy within the Health Center. Some of the PHCCs may be rented buildings not originally designed as PHCCs; hence the area selected as a pharmacy may not be ideally situated. Similar findings were reported from neighboring Saudi Arabia. Satisfaction with pharmacy services could be augmented by further improvement in the communication skills of pharmacists, as shown in some studies.

Dissatisfaction with dental services was mostly related to equipment that may have been old or inadequate. However, patients sometimes expect to have dental services and equipment similar to that found in specialized dental centers. This may also explain the low satisfaction for radiological services, and seems similar to findings of studies showing that patients expected PHCCs to offer the same range of laboratory services provided by hospitals.

There seems to be a genuine need for educating patients about the broader objectives and limits of PHCCs. As for the patients’ sociodemographic correlates of satisfaction with the services offered, only gender, income, occupation and marital status appear to be correlated with satisfaction. Studies have reported variable associations of satisfaction according to the sociodemographic characteristics of patients. The findings of these studies did not reveal a consistent pattern and at times reported contradictory patterns in many countries in the Gulf Region, such as the UAE, Qatar and Saudi Arabia. Our data appear to indicate that higher satisfaction with physicians’ and allied medical services was significantly associated with patients who were female, single, and unemployed, with lower education and income levels. The findings of the present study point to low satisfaction scores with physician services, site of pharmacy, radiological and dental equipment. The aspects of the physician/patient relationship which are related to greater patient satisfaction include clarity of physician communication with their patients and involving patients in decision-making. Physicians’ services need to be improved in certain areas to boost patients’ satisfaction. An educational program for all consumers is needed to inform them about the philosophy, objectives, strategies and limitations of Primary Health Services. This is an important aspect for increasing levels of utilization and satisfaction with primary health services. We hope that other studies will be carried out in a
larger sample of subjects and PHCCs covering the other aspects of health services offered. The results of such studies can be valuable in planning new services and expanding and reorganizing current services.

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