

Evaluation of Patient Satisfaction with Medical Services at Traditional Iranian Medicine Clinics in Tehran

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| ARTICLE INFO | ABSTRACT |
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| <p>Article type: Original Article</p> <hr/> <p>Article history: Received: 1-June-2015 Accepted: 22-June-2015</p> <hr/> <p>Keywords: Health care Patient satisfaction Process assessment Traditional medicine</p> | <p>Introduction: Evaluation of patient satisfaction is a common method used to determine the quality of medical services. This study aimed to assess the level of satisfaction in patients referring to the clinics of traditional Iranian medicine affiliated to Tehran University of Medical Sciences (TUMS), Iran.</p> <p>Materials and Methods: This cross-sectional study was conducted on 260 patients with history of at least two referrals to the clinics of traditional medicine at TUMS. Subjects completed the Persian version of Patient Satisfaction Questionnaire (PSQ-18). Data analysis was performed using T-test, Chi-square, ANOVA and Pearson's correlation coefficient.</p> <p>Results: Out of 260 patients with the mean age of 41.01±12.95 years, 104 patients (63.1%) were satisfied, 9 (3.4%) were completely satisfied, 67 (25.8%) were dissatisfied with the medical services, and 20 patients (7.7%) were uncertain. In subscales of access to physician, time spent with doctor, interpersonal manner and overall satisfaction, number of satisfied patients was higher than their dissatisfied counterparts. However, rate of dissatisfaction was higher in subscales of technical quality, communication and financial aspects of care. Moreover, no statistically significant relationship was observed between satisfaction scores and age, gender, education status, type and duration of disease and marital status of the subjects.</p> <p>Conclusion: According to the results of this study, over 60% of the patients were satisfied with the health care services offered at traditional medicine clinics. Insurance coverage for traditional treatments could significantly reduce treatment costs. Furthermore, technical quality and communication skills of practitioners need to be improved through training courses in the field of traditional medicine.</p> |

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Introduction

Patient satisfaction has variable definitions in the literature; according to some authors, this parameter represents the attitude of patients towards different aspects of health care (1, 2). In other studies, patient satisfaction has been defined as the degree of concordance between patients' expectations of the desired medical care and their perception of the received care (3, 4).

Customer satisfaction is simply defined as the pleasant feeling of the customer, which comes from the comparison of purchased products to their expectations.

In other words, satisfaction is the feeling of contentment resulted from fulfilling the needs or

wishes of an individual, as well as the cognitive and emotional response to the environment through which the individual announces the fulfillment of their needs.

Satisfaction with medical services encompasses the fulfillment of social, psychological and disease-related needs of patients (5). Customer satisfaction is a major goal in every organization, and the ultimate target in every strategy. For constant quality improvement, provided services have to be evaluated on a regular basis. Service evaluation reveals the shortcomings of services, causing practitioners to enhance their skills.

Assessment of health care services by patients could help decision makers with effective planning, as well as

reducing the costs of these services and monitoring healthcare performance of medical professionals (2, 6).

Quality of medical services could be perceived through the level of patient satisfaction and success rate of treatments. Satisfaction is a key element in obtaining desirable patient outcomes and preventing disease consequences. In addition, it is one of the main goals of therapeutic activities and a significant indicator of quality of care. Patient satisfaction leads to several benefits, such as improving the interaction between physician and patient, providing the required information to enhance health care programs, obtaining feedbacks from patients about the performance of medical staff, increasing patient referrals and enhancing the financial status of health organizations (7-9).

Patient satisfaction depends on the structure, process and consequences of care, as well as social, demographic, physical and psychological factors.

Moreover, it is affected by other parameters such as the potency and duration of disease, as well as the expectations of patients. Other contributing factors are doctor-patient communication, treatment costs, physical environment and facilities offered by health care centers (10). To measure patient satisfaction, we should assess the combination of different interpersonal, technical, social and moral aspects of care (11).

Due to the need for better quality of health care services in developing countries, patient satisfaction has become a major concern among researchers, and several related articles have been published in these countries within the past 20 years (9).

Traditional Iranian medicine dates back to several hundred years ago and has long been practiced by Iranian physicians. There are many private centers providing traditional medical services in our country.

Academic education of traditional Iranian medicine started in 2008 in Tehran and currently, several universities offer educational courses in this field of medicine.

To date, no studies have evaluated the level of patient satisfaction with traditional medicine health services. This study aimed to assess this parameter among the patients referring to traditional medicine clinics affiliated to Tehran University of Medical Sciences (TUMS) in 2014.

Materials and Methods

This cross-sectional study was conducted in the clinics of Iranian traditional medicine affiliated to TUMS in 2014 (ethical code: 26p/m/t/699). Sample size consisted of patients above 18 years of age, with history of at least two referrals to the clinics of traditional medicine at TUMS. Subjects had the ability to read and write, and written informed consent was obtained prior to the study.

In a pilot study, patient satisfaction was estimated at 60% in a sample size consisting of 260 patients,

considering random error rate of 0.05 and accuracy of 0.06. In the present study, subjects were selected by convenient sampling to obtain the required sample size.

Data were collected using two-part questionnaires; the first part focused on the sociodemographic characteristics, and the second part was designed based on the Patient Satisfaction Questionnaire (PSQ-18), composed of 18 items.

PSQ-18 was first developed by Marshall and Hays in 1994 (12). This questionnaire contains seven subscales, as follows: general satisfaction (2 items), technical quality (4 items), interpersonal manner (2 items), doctor-patient communication (2 items), financial aspects of care (2 items), time spent with doctor (2 items) and access to physician (4 items).

In this study, questions were scored on a five-point Likert scale (Totally Agree, Agree, Not Sure, Disagree and Totally Disagree). Total score range was 18-90, and mean of scores in each subscale was calculated to obtain the total score (12-14). Validity and reliability of the Persian version of PSQ-18 have been approved by several studies. In a study by Zahednejad, Cronbach's alpha was estimated at 0.67 (15), and in another study by Ziaei, Kappa's coefficient was calculated to be 0.96 in the test-retest of the Persian version of the questionnaire (16).

Reliability of the Persian version of PSQ-18 was verified in a pilot study performed on a sample size consisting of 20 patients using the test-retest method, and statistical measure of agreement (Kappa's coefficient) between the paired responses of subjects was >0.8 . Moreover, 50 patients completed the questionnaires initially in order to predict possible difficulties during investigation, and Cronbach's alpha was reported to be 0.72.

In this study, questionnaires were completed by trained interviewers at the time of discharge in a face-to-face manner during 15 minutes. Quantitative variables were presented as mean \pm standard deviation, and qualitative data were presented as number and frequency. Data analysis was performed using T-test, Chi-square, ANOVA and Pearson's correlation coefficient in SPSS Version₁₇.

Results

In total, 260 patients completed the questionnaires in this study. Sociodemographic characteristics of the participants are presented in Table 1.

The most frequent complaints were gastrointestinal disorders in 67 cases (25.8%), musculoskeletal disorders in 41 patients (15.8%), menstrual disorders in 21 cases (8.07%), metabolic and endocrine disorders in 20 patients (7.6%), hair and skin disorders in 19 subjects (7.3%), headaches in 18 patients (6.9%) and allergic disorders in 10 cases (3.8%). Other complaints were obesity, insomnia, anxiety and anemia. Mean of disease duration in the studied patients was 69.47 ± 67.21 months, and length of referrals to traditional medicine clinics was 6.48 ± 6.6 months.

In addition, history of conventional treatment before admission at traditional medicine clinics was positive in 236 patients (90.8%). Total and subscale scores of

PSQ-18 are shown in Table 2, and frequency of the total scores of questionnaires are depicted in Figure 1.

Table1: Sociodemographic Characteristics of Participants

| Variables | | |
|-----------------------------|---------------------|---------------|
| Age Mean±SD | | 41.01 (12.95) |
| Gender N (%) | Female | 168 (64.6) |
| | Male | 92 (35.4) |
| Education Status N (%) | Illiterate | 26 (10) |
| | Undergraduate | 40 (15.4) |
| | High School Diploma | 112 (43.07) |
| | Academic | 82 (31.53) |
| Marital Status N (%) | Single | 57 (21.9) |
| | Married | 192 (73.8) |
| | Widowed | 6 (2.3) |
| | Divorced | 5 (1.9) |
| Place of Residence N (%) | Tehran | 193 (74.2) |
| | Other | 67 (25.7) |

Table2: Total and Subscale Scores of Patient Satisfaction in PSQ-18

| | Minimum and Maximum Scores | Mean (SD) | Satisfaction Level N (%) | |
|------------------------------|----------------------------|------------|--------------------------|--------------|
| Subscale | General Satisfaction | 3-10 | 6.2 (1.08) | 1 (0.4) A |
| | | | | 56 (21.5) B |
| | | | | 72 (27.7) C |
| | | | | 119 (45.8) D |
| | | | | 12 (4.6) E |
| | Technical Quality | 7-20 | 12.8 (2.2) | 17 (6.6) A |
| | | | | 125 (48.1) B |
| | | | | 50 (19.2) C |
| | | | | 64 (24.6) D |
| | | | | 4 (1.5) E |
| Interpersonal Manner | 4-10 | 6.7 (1.2) | 0 A | |
| | | | 21 (8.1) B | |
| | | | 90 (34.6) C | |
| | | | 117 (45) D | |
| | | | 32 (12.3) E | |
| Doctor-patient Communication | 2-10 | 5.9 (1.4) | 3 (1.2) A | |
| | | | 100 (38.5) B | |
| | | | 74 (28.5) C | |
| | | | 70 (26.9) D | |
| | | | 13 (5) E | |
| Financial Aspects of Care | 2-10 | 5.1 (1.6) | 47 (18.1) A | |
| | | | 78 (30) B | |
| | | | 98 (37.7) C | |
| | | | 29 (11.2) D | |
| | | | 8 (3.1) E | |
| Time Spent with Doctor | 2-10 | 6.5 (1.4) | 7 (2.7) A | |
| | | | 40 (15.4) B | |
| | | | 85 (32.7) C | |
| | | | 101 (38.8) D | |
| | | | 27 (10.4) E | |
| Access to Physician | 5-19 | 13.2 (2.5) | 8 (3.1) A | |
| | | | 38 (14.6) B | |
| | | | 32 (12.3) C | |
| | | | 167 (64.2) D | |
| | | | 15 (5.7) E | |
| Total Score | 43-86 | 56.9 (6.4) | 0 A | |
| | | | 67 (25.8) B | |
| | | | 20 (7.7) C | |
| | | | 104 (63.1) D | |
| | | | 9 (3.4) E | |

Maximum score achieved by the studied subjects was 86 (maximum score of questionnaire: 90), while the total score was calculated to be ≤ 56 and ≤ 60 in 50% and 75% of the participants, respectively. In general, 113 patients (66.5%) were satisfied or totally satisfied with traditional medicine treatments, whereas 67 patients (25.8%) were dissatisfied. Distribution of the total scores of questionnaires is shown in Figure 1.

Frequency of satisfied patients was comparatively higher in terms of the total and subscale scores of the questionnaire in dimensions of access to physician,

time spent with doctor, interpersonal manner and general patient satisfaction. On the other hand, frequency of dissatisfied patients was higher in dimensions of technical quality, doctor-patient communication and financial aspects of care. In this study, no statistically significant correlation was observed between the total score of patient satisfaction and variables such as age, gender, education status, type and duration of disease and marital status of the subjects.

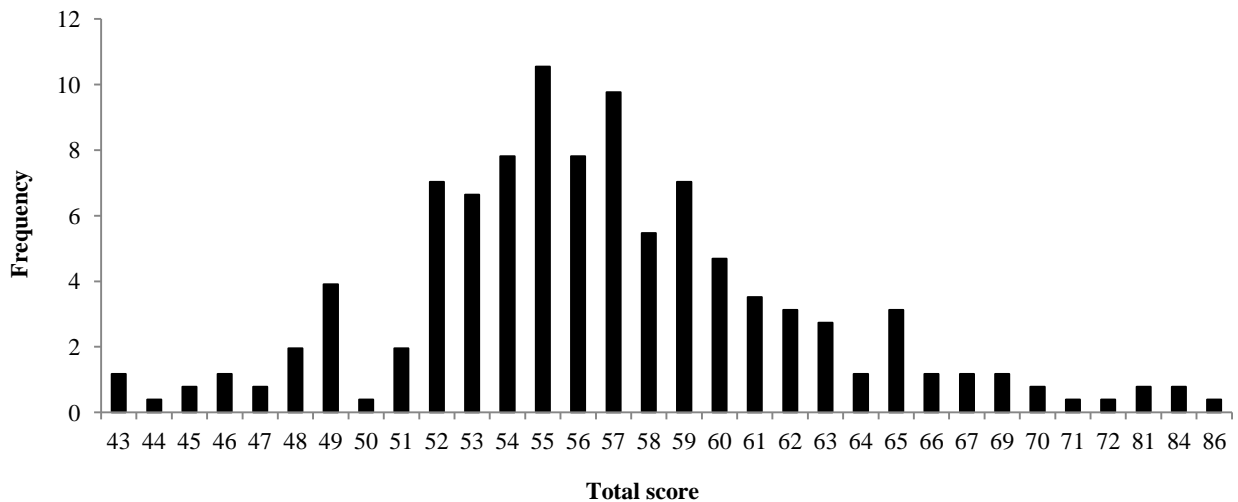


Figure1: Distribution of Total score

Discussion

According to the results of this study, more than 60% of the patients referring to traditional medicine clinics at TUMS in 2014 were satisfied with the provided services. The most common cause of patient dissatisfaction was poor technical quality (e.g., inadequacy of diagnostic and therapeutic equipment, inappropriate diagnostic methods, unsuitable patient examination and lack of confidence in physician's ability for patient treatment), financial aspects of care (e.g., high costs of traditional medicine treatments) and poor doctor-patient communication (e.g., lack of attention and clear explanation of patient conditions on behalf of the physician).

Patient satisfaction has been evaluated in several studies in different clinical settings in Iran. In a study conducted in Labbafinejad Hospital (Tehran, Iran) in 2008, patient satisfaction with ophthalmic services was reported to be 71%, and the main cause of dissatisfaction was poor technical quality and access to physician (16).

In another study performed in 2009, patient satisfaction with medical services offered at the general hospitals of Isfahan University of Medical Sciences (Isfahan, Iran) was reported to be 56%, and the subscale accounting for the lowest score was doctor-patient communication (17). In a meta-analysis, patient satisfaction with the performance of medical staff and

presentation of health care services was estimated at 68.9% in the emergency sections of hospitals in Iran (18).

According to the literature, doctor-patient relationship is the most significant parameter affecting patient satisfaction; in other words, the highest priority of patients is to be treated with courtesy and respect by nurses and physicians (16, 15-21).

In the traditional Iranian medicine, disease diagnosis is mainly based on the medical history and examination of patients. In patient examination, the physician scans the face, tongue, pulse and body temperature, and no special instruments are used as opposed to modern medicine. Obtaining medical history may take more time compared to conventional medicine in order to achieve diagnostic accuracy. In general, patients expect to be clear on the medical history, process of examination and disease diagnosis, and the reason behind prescriptions. Furthermore, they wish to be actively involved in the process of diagnosis and treatment of their disease.

Despite the long history of several medical procedures, use of novel treatments in Iran may lead to the mistrust of patients to the physician. Therefore, awareness should be raised among about the efficacy of traditional medicine among different patients.

In the references of traditional Iranian medicine,

there are general recommendations regarding the improvement of lifestyle through adherence to healthy diets, use of medicinal herbs and physical activities, such as massage, phlebotomy and cupping. Most of the herbs prescribed by traditional medicine practitioners are native to the regional parts of Iran. Use of such indigenous treatments, along with more efficacious or equivalent chemical medications, is mainly aimed at the reduction of treatment costs in every country.

Since traditional medicine is not under insurance coverage in our country, the patients must pay all the expenses of plant collection, production of herbal medicines and dietary plans. One of the foremost recommendations in the traditional Iranian medicine, which helps to reduce treatment costs, is to start disease treatment through improving nutritional options and lifestyle, followed by the use of drugs. Moreover, use of convenient medications is preferable to combined or complex treatments; this needs to be taken into account in academic clinics of traditional medicine.

Effective interventions that could enhance patient satisfaction would include comprehensive training programs, in which health care providers fully realize the fact that they are expected to show courtesy and respect for patients. As such, well-trained nurses and health care staff would be able to comfort patients, and consequently improve their satisfaction (20, 21).

In the present study, no statistically significant relationship was observed between patient satisfaction and sociodemographic characteristics, and type and duration of diseases. In the studies by Ziaei (16) and Hall (21), no significant associations were found between patient satisfaction with medical services at health centers and demographic characteristics.

However, some studies have reported sociodemographic factors (e.g., age and education status) to be the most significant predictors of patient satisfaction with medical treatments (22, 23).

Previous studies evaluating the correlation between patient satisfaction and demographic factors, such as age, gender, health status and education level, have offered conflicting results (3). In this regard, one study was conducted in Scotland on 650 patients discharged from four general hospitals specialized in the treatment of acute diseases in 2002, and another study was performed in 32 different tertiary hospitals in the U.S.

According to their findings, male gender, age above 50 years, short length of hospitalization, better health status and primary levels of education are associated with higher scores of patient satisfaction with health services (21, 24).

In a survey conducted in three countries located in the Balkans, patient trust and overall satisfaction with the attention of physicians were reported to be the most significant indicators of patient satisfaction. In addition, length of waiting time and administrative procedures were common predictors for poor patient satisfaction with health care services (24). Therefore, it could be concluded that reducing waiting time and ensuring

sufficient time spent on examinations could have significant effects on the improvement of satisfaction levels among diabetic patients. It is hoped that official statistics could be further applied to future studies regarding public health policy (3).

In one study conducted in hospitals of Kerman, Iran, a significant correlation was observed between patient satisfaction and gender of physician; in other words, level of satisfaction was higher in patients visited by male doctors. Furthermore, an inverse significant correlation was reported between patient satisfaction, education status and overall health of patients. However, the relationship between patient satisfaction, age and gender was not significant (25).

In the study by Sahebzadeh (2010), PSQ-46 questionnaire was used, and subscales of doctor-patient communication, technical quality and interpersonal manner accounted for the lowest scores, respectively.

Moreover, no significant correlations were found between overall patient satisfaction, gender and marital status. However, married patients were more satisfied with financial aspects of care compared to single subjects. Also, education status of patients was inversely correlated with satisfaction in the subscale of patient-doctor communication, while it was directly correlated with financial aspects of care (17).

As demonstrated in three other studies conducted in this regard, factors such as interpersonal communication skills of physicians, clear explanation of patient conditions, level of medical care, emotional support, respect for patient and patient involvement in medical decision-making were more effective on the level of patient satisfaction compared to other parameters, such as clinical competence and quality of hospital services (26-28).

One of the limitations of the present study was selection bias, as we only evaluated available patients.

It is obvious that patients who were not satisfied with the health care services did not frequently refer to the investigated clinics, and therefore, they were not enrolled in this study. Interviewing all visitors is a more reliable alternative for the accurate assessment of patient satisfaction. Additionally, the results would be more accurate if patients completed questionnaires after being visited by physicians. Another limitation of the current study was the small sample; consequently, we could not investigate the relationship between patient satisfaction and several other factors. Based on the inclusion criteria of this study, more time was required as to evaluate patients in a larger sample size.

Conclusion

According to the findings of this study, more than 60% of the patients were satisfied with the health care services offered by the clinics of traditional Iranian medicine. In this regard, insurance coverage for traditional medicine could greatly reduce treatment costs. Furthermore, necessary training is needed in order to improve the technical quality and

communication skills of traditional medicine practitioners. In conclusion, it is recommended that regular surveys be conducted annually using different methods as to enhance the quality of medical services in hospitals and health centers.

Acknowledgement

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