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The Importance of Physicians' Communication Skills and Patients' Satisfaction

Mahsa Narenjiha [1], Shahpar Haghighat [2], Hamidollah Bahaddor [1], Jila Shajari [1], Seyed Behnamedin Jameie [3,4*]

[1] Medical Education Department, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, IR Iran
[2] Iranian Center for Breast Cancer, ACECR, Tehran, IR Iran
[3] Department of Medical Basic Sciences, Faculty of Allied Medicine, Tehran University of Medical Sciences, Tehran, IR Iran
[4] Anatomy Department, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, IR Iran

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ABSTRACT

Background: Doctor-patient interaction plays an important role in patient satisfaction, treatment results, medical expenses, quality of clinical services and even patient's complaints toward doctors and health care system.
Objectives: This study was performed to assess the level of patient satisfaction in the Iranian context.
Materials and Methods: This cross-sectional study was conducted in a public clinic in Tehran in 2010. The participants included 392 patients who referred to this center for a period of two months. A patient satisfaction questionnaire was used which had 24 items on patient satisfaction with the communication skills of the physician that included six subscale scores. The total score and subscales scores were calculated on a maximum possible of 100.
Results: The mean age of the patients was 38 years and 69% of them were female. The education level of most patients was high school diploma or higher (72%). The mean patient satisfaction score was 44 ± 15. Patients expressed highest satisfaction with patient training (56 ± 24) and response to their questions (49 ± 17) while they were least satisfied with the examination (31 ± 23). No significant relation was found between patient age and overall patient satisfaction (P = 0.392, r = 0-.007). In addition, no significant differences were found between the overall scores of male and female or married and single patients. However, highly educated or salaried employee patients showed a higher satisfaction score than self-employed or unemployed patients ($P < 0.001$). The results of the regression analysis showed education and employment status of patients to be the effective variables on patients' satisfaction.
Conclusions: The results of the present study revealed that patients are not highly satisfied with the communication skills of physicians and they were least satisfied only with the quality of examination processes by the physicians. In addition, patients with lower education showed lower satisfaction as well. Thus, a higher quality and elaboration of examination, more patience and better communication skills considering the education and social status of the patients may increase patient satisfaction.

Implication for health policy/practice/research/medical education:
The results of this research work and other same studies help the health policy makers and health care staff to promote the quality of certain treatments.

* *Corresponding author:* Seyed Behnamedin Jameie, Department of Medical Basic Sciences, Faculty of Allied Medicine, Tehran University of Medical Science, Tehran, IR Iran. Tel: +98-2188622598, Fax: +98-2188622598, *E-mail:* behnamjameie@tums.ac.ir

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1. Background

Today patient satisfaction counts as an important indicator in the assessment of the quality of healthcare services (1, 2). Low patient satisfaction may result in loss of trust and consequently changing the treating physician or the healthcare center or even discontinuing treatment (3). In addition, it may lead to suing the physicians, the healthcare system and malpractice lawsuits (4, 5). Therefore, patient satisfaction and the mutual benefits to patients and healthcare systems particularly to physicians have been widely researched and emphasized recently.

Patient satisfaction is influenced by several factors that include different aspects of healthcare services such as increased hospital facilities, increased number of personnel, accessibility to primary healthcare services and reduced wait time for receiving healthcare services (6, 7). Among them, the interaction between the medical staff, particularly the physicians with the patient is a significant factor in patient satisfaction. Doctor-patient communication during history taking or discussion about management plan plays an important role in establishing a trusting physicians-patient relationship, which in turn becomes an important factor that leads to achieve appropriate information exchange and thus achieving desirable treatment results (8-11). It also increases the quality of clinical services by physicians and minimizes patient complaints against physicians (1, 12, 13). Therefore, an appropriate communication model leads to both patient and physician satisfaction (14).

2. Objectives

To our knowledge, few studies have evaluated the Iranian patient's satisfaction based on culture, education and other factors. Considering the important effects of culture backgrounds on communication, the present study was done to investigate the possible association between physician-patient communication and patients' satisfaction' (15-18).

3. Materials and Methods

The present cross-sectional study was conducted at a public clinic in Tehran (Ghods Clinic of the Social Security Organization) in 2010. The patients or their companions were able to understand the questions and express their opinions in response to the questions. Three hundred and ninety two patients were sequentially selected during a two-month period. Once the patients were oriented about the goals of the research, they filled out a demographics checklist (inquiring about age, sex, education, marital status and employment) and filled out the patient satisfaction questionnaire. An ethical approval was granted from Tehran University of Medical Sciences and written consents were obtained from all participants.

Patient satisfaction with communication skills of physicians was measured using the Patient Satisfaction Questionnaire of the American Board of Internal Medicine (19). The questionnaire consists of 24 items on satisfaction with patient-physician communication measuring six subscales including physician approach, interview and patient history, clinical examination, patient training, patient condition follow-up and exchange information between patient and physician. Items were scored on a five-point Likert scale ranging from Strongly Disagree (zero point) to Strongly Agree (four points). Subscale scores were obtained by sum of the included item scores and the overall score was obtained by sum of the all items in the questionnaire. Since the number of items in each subscale was different, they were converted to 100 (dividing the obtained score by maximum score and multiplying by 100). The total score was also based on 100. The Persian version of the questionnaire had already been validated in a research study in Iran (18). The validity of the questionnaire was confirmed by 12 academic authorities and its Cronbach alpha coefficients was calculated to be 0.93. To re-confirm the reliability of the questionnaire, we tested it on 25 participants and obtained Cronbach alpha coefficients of 0.86. In addition, to prevent acquiescence (yea-saying or nay-saying) response set the items were arranged in an unpredictable manner, some starting with strength and some with weakness.

Data were analyzed using SPSS v.16 for Windows. Frequency (percentage) and mean (SD) were used as descriptive statistics. To examine the effect of sex, marital status, education and employment on patient satisfaction, we used independent-samples t-test and ANOVA. Pearson correlation was used to measure the strength of relationship between age and patient satisfaction. The interaction effects of factors on patient satisfaction were measured through linear regression analysis.

4. Results

The range of and the mean (SD) age of patients were 18-80 and 38 ± 14 years, respectively. 270 patients (69%) were female and 284 (72%) were married. Of all participants, 282 (72%) were educated at high school diploma or higher levels. As for employment, 113 (29%) were salaried government employees, 208 (53%) self-employed and 71 (29%) were unemployed. *Table 1* shows the overall and subscale scores for patient satisfaction. The overall patient satisfaction was lower than 50%. They were mainly satisfied with patient training and answering their question by

Table 1. Overall and Subscale Scores for Patient Satisfaction From Physician -Patient Communication

Subscale Score	Range	Mean (SD)
First physician approach	4.17 - 75	39 ± 12
Interview and patient history taking	0 - 93.75	43 ± 20
Clinical examination	0 - 100	31 ± 23
Patient training	0 - 100	56 ± 24
Patient condition follow-up	0 - 100	39 ± 27
Giving information to patient and response to his/her questions	5 - 100	49 ± 17
Overall score	6.25 - 81.25	44 ± 15

Table 2. The Relation Between Overall Patient Satisfaction Score and Demographic Variables

Variable	Mean (SD)	*P* value
Sex		0.283
Female	44 ± 15	
Male	45 ± 14	
Marital status		0.968
Single	44 ± 15	
Married	44 ± 15	
Educational level		< 0.001
Less thLess than 12 years 2 years	38 ± 14	
More than 12 years	44 ± 14	
Job		< 0.001
Unemployed	42 ± 16	
Self-employed	42 ± 14	
Government employee	49 ± 15	

physicians. The least satisfaction came from clinical examination.

No significant relation was found between patient age and overall satisfaction ($P = 0.392$, $r = -0.007$). *Table 2* illustrates the relation between overall patient satisfaction score and different demographic variables. The overall patient satisfaction score did not differ by sex and marital status. However, higher educated and salaried government employees showed higher satisfaction compared with self-employed and unemployed participants ($P < 0.001$).

A regression analysis was performed to investigate the importance of demographic variables. Employment was treated as two dummy variables and entered into the regression model as independent variables. *Table 3* shows the results of the linear regression analysis with entry method. As shown in *Table 3*, education and employment (government employed *vs.* unemployed) were significant factors.

5. Discussion

The results of the present research showed that the overall satisfaction of physician-patient communication was less than 50%. Highest satisfaction score came from patient training and the least one with the physician's clinical examination. Higher education and also patients with salaried governmental jobs were associated with the highest satisfaction among all patients.

Today, communication skills are considered as a significant enabling factor in the professional performance of physicians. Cornstock *et al.* reported that showing respect to and greeting the patients at the beginning and at the end of a visit have a significant effect on their satisfaction (20, 21). In addition, establishing a friendly rapport, instead of a mere business interaction with patient, conducting appropriate interview and treatment with patient and posing appropriate questions are shown to follow patient satisfaction (22, 23). On the other hand, direct and repeated questioning along increased patient anger, anxiety and stress leads to patient dissatisfaction (24). Williams *et al.*, showed that some patients expressed their complaint about their doctor's failure to pursue follow-up care because of their work overload (25). Roter *et al.*, found that positive verbal behavior and participatory structure during counseling, allocation of appro-

Table 3. Effect of Demographic Variables on Patient Satisfaction From Doctor-Patient Communication, Results of Linear Regression Analysis With Entry Method

	B	Std. Error	Beta	*t*- test	Sig.
(Constant)	32.641	6.031		5.412	0.000
Age	0.063	0.065	0.059	0.967	0.334
Sex	1.799	1.725	0.056	1.043	0.298
Marital status	- 0.004	1.806	0.000	- 0.002	0.998
Education	5.867	1.903	0.177	3.082	0.002
Job (government employed / unemployed)	- 4.481	2.361	- 0.116	- 1.898	0.058
Job (government employed / self-employed)	- 4.847	1.761	- 0.162	- 2.753	0.006

priate time to the patient, doctor's good skill in clinical examination of the patient and providing their needed information have an effective role in increasing patient satisfaction (26, 27).

Our findings showed that patients had low-level of satisfaction about their communication with physicians (44%), which in turn may reflect poor communication skills of the physicians. Items related to the medial skills (i.e. interview and history taking, patient training and responding to patient questions) were rated higher although clinical examination received the lowest sore. Our data also showed that the items requiring non-professional physician-patient relationship (treating behavior and patient condition follow-up) scored lower. These findings imply that although the physicians have fewer problems in transferring information about the conditions to the patients, they fail to improve general communication with patients. As for clinical examination, it seems that failing to use general social communication skills with the patient for the elaboration of examination process or its results caused meager satisfaction in patients. Therefore, adding social communication skills course to medical curriculum may further leads to promote patients' satisfaction. However, one should bear in mind that because of heavy influx of patients to public clinics, particularly in the Iranian context where access to healthcare services may be limited, doctors have limited opportunities in treating the patients.

Our study showed that higher education and salaried governmental job are correlated with higher patient satisfaction. In contrast to our finding, other studies on patient satisfaction in other societies with almost similar cultural criteria show that lower education is correlated with higher patient satisfaction (28, 29). However, some studies showed no significant differences (30). The higher satisfaction level in patients with lower education could be explained by the hypothesis that such patients who have low-level general knowledge and information, make fewer inquiries from the physicians and thus would be more satisfied. On the other hand, one may conclude that patients with higher education and thus possibly with higher general information about diseases can better understand their treating, establish a better relation and feel more satisfied. Anyway, physicians need to adjust their elaborations with the level of education and understandi perception of their patients.

Knowledge of the social and cultural ethos of patients may enhance communication. It has been shown that adequate time spent with the patient and the years of experience do not individually lead to patient satisfaction unless a mutual physician -patient understanding and empathy is established (31). Our results also showed that salaried government employees had a higher satisfaction with physician's communication. This can be explained by the different assumption such as salaried employee patients have the advantage to choose their doctor of choice so they may receive better communication or they recognize the doctor as a fellow employee of the government who can more easily understand their office work and work-related problems.

The small sample size in this research compared with similar studies and conducting the study in a public health institution may be considered as limitations for the extension of the results. However, the results of this study may alert health care policy makers to this fact that they need to increase the quality of health services parallel to quantitative increase in healthcare facilities. There are also other factors may influence patients' satisfaction such as the nature and duration of the disease which did not consider in this study and needs more attention and evaluation in further studies.

Since many studies have shown that improved physicians' communication skills are able to enhance patient satisfaction and the clinical results of the treatment (32-34), health system authorities should address medical staff-patient interactions as one of the most important factors in patient satisfaction. In this regard, patient satisfaction also needs to pay more attention to clinical examination and explanation of its process and results to patient. In order to achieve an acceptable level of patient satisfaction, physicians should adjust their communication level with the social and educational context of patients and adhere to effective communication skills with low-level educated and low-socioeconomic status patients.

Based on our data and in order to create empathy and establish a participatory relationship in different therapeutic steps, health system policy makers should develop and expand healthcare facilities along with organizing social communication skills courses for medical staff .

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