Effect Of Patient-Physician Communication On Patients' Satisfaction: In A Healthcare Organization In South Of IRAN

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***Abstract*—In the recent years patient's satisfaction is being discussed as one of the high importance issues for quality improvement in healthcare organization. Patient's satisfaction is affected by many factors like accurate diagnosis, proper instruction for treatment, information exchange between the patient and physician, good communication and giving proper advice to the patient and involving him/her in the final decision. These parameters help the physician to provide simple and comprehensive information about illness and help the patients to understand the needs, expectations and also providing a proper health care. The aim of the present study is to develop the approaches which matches cultural and regional context for gaining maximum satisfaction of patient in health care system by evaluating patient's satisfaction and its related factors.**

Subject and Method: This cross-sectional study is conducted in Namazi Teaching Hospital between October 2017 and February 2018. A total of 321 hospitalized patients in three wards of internal, pediatrics and surgery were questioned and 227 patients that knew their physicians, questioned by the questionnaire. Samples were taken by random numbers table method. The Questionnaire was derived from Smith-Falvo job satisfaction questionnaire and was customized to the desired target population characteristics. Content validity method is used to validate the questionnaire by faculty members. For internal reliability and Cronbach's alpha, obtained validity coefficient is equal to 0.955. SPSS 19software was used for analysis of data.

Results: Average and standard deviation of patients' satisfaction for the surgery, pediatrics and internal wards were 0.96±0.26, 0.95±0.15, 0.98±0.4 respectively. There was a significant relation between the overall satisfaction and the ward (p=0.01). In surgery ward average and

good satisfaction levels had the highest values. In the pediatric ward the total of patients' satisfaction in average and good levels was lower than surgery ward. While poor level of satisfaction in internal ward was more than the others, and internal ward was the only ward with very poor level of satisfaction.

Conclusion: The results of this study indicate need for a higher quality and more effective communication with the patients. Higher level of communication skills results in higher patients' satisfaction level and by using patients' health comments; some parts of care systems problems can be resolved.

Keywords—Patient-Physician Communication, Patient's Satisfaction, health care system

Introduction

In the recent years patient's satisfaction is being discussed as one of the high importance issues in the health care system. Patient's satisfaction is influenced by many factors such as accurate diagnosis, proper instruction for cure, information exchange between the patient and physician, good communication and giving a proper advice to the patient and involving him/her in the final decision [1]. The effective patient-physician communication helps the physician to provide simple and comprehensive information about illness and help the patients to understand needs and expectations and also provide a proper health care [2-4].

Breaking bad news is one of the most challenging tasks in patient-physician relationship. The structure of this relation has an important impact on facilitating this issue [5, 6]. Communication behavior differs in different people, and physicians are not an exception. In fact, no one has these skills in themeself, but needs to learn the principles and related skills of communication. Theoretical knowledge of these skills cannot guarantee to achieve this goal, but expression of physician's attitude to the importance of illness, explaining treatment goal to the patient and mental support of the patient can help physicians to reach this goal [2, 9].

Barriers to a good patient-physician communication include panic and patient anxiety, physician fatigue, fear of legal actions, afraid of physical and vocal abuse, and irrational expectation of patient [10]. There are many reports for physician's refusal to argue about effect of emotional and communication difficulties to their disability to control these types of problems or either not having enough time to deal with them. This condition can form a vicious cycle and increases the physician's stress and leads to patient dissatisfaction and their unwillingness to explain their problem and ultimately will cause delay in their recovery [11]. It has been seen that some of physicians discourage their patient to stating concerns, expectations, and having more information about sickness. This behavior gives the patient a feeling of inability to understand the disease and cure purposes and ultimately refusal of giving detailed description and exchange of information between the patient and physician leads to treatment failure [12].

Some of these barriers are affected from patient's attitude to patient-physician relationship, such that patients' resistance to physician authority and insisting on giving their limited medical information especially in specialized areas can be of negative factors in a precise relation between patient and physician [13].

Acquisition of communication skills by physician and conducting good patient-physician relationship helps patient to cooperate as an active member in a discussion related to his health and therefore increases his confidence level which is an effective parameter in his recovery. Interactive and dynamic relation which is also known as collaborative communication is

a two-way exchange of information. In an idealist society having a good patient-physician relation requires such communication because it's expected from physicians to decide based on a fast evaluation and this decision sometimes may be biased [14]. In this kind of relation, physician has to put some time on stating and discussing about treatment options and sharing responsibilities and control process of the treatment for patient. Consequently there will be a way for extracting and exploring patient's concerns and also understandable treatment options and joint decision about treatment will be performed easier [3, 7]. In order to evaluate patient's satisfaction value, we need a valid and reliable method. In a review paper in 1978, over 100 articles on patient's satisfaction were cited with the assumption that satisfaction questionnaires are valid and reliable ways to evaluate patient's satisfaction with physicians. While only 11 out of 81 experimental studies reported a reliable evaluation on measuring patient's satisfaction and others had a weak reliability in one-item measurement. Authors also noted that satisfaction score validity which depended on various parameters related to special characteristics of health care providers, are extremely limited.

After this research, efforts increased to provide a more valid and reliable method for measuring patient's satisfaction [15]. In 1984, a new scale was designed to measure the patient's satisfaction with researcher's defined items [16]. Also in 1979, Biehn, published a scale in which, items were selected by the researchers not the patients, without any discussion on validity and reliability [17]. Comstock in an interview asked patients about their priority before selecting the items but there is no documentation on validity and reliability in this work either [18].

In Dimatto's study which had more progress than prior works, individual items were selected by the researchers, but their validity was concurrently confirmed. All of the patients were asked that if they are interested in revisiting the same physician again while patients were made sure that answers are anonymous and physician would not be informed about their answers. A positive answer to revisit the same physician was a sign of patients' satisfaction but nonetheless, the score of this scale was significantly decreased because its reliability was not determined [19].

There were other researches to achieve a better method for measuring patient's satisfaction. In one study, 50 patients were studied with a critical view of all possible relations between items in the scale. Internal consistency and subsequently reliability of this study confirmed by the Cronbach's alpha coefficient, but more studies were required for its validity.

In 1983, Smith and Falvo designed a scale in which after interviewing with the patients, 1540 patients described physician's behavior which they prefer physicians to do, or not to do were listed. Reliability, internal reliability with Cronbach's alpha, test-retest method and concurrent validity based on patient's interest rate, which was determined by patient's intent to revisit the same physician in next time, convergent validity based on score and also Wolf's scale were evaluated [21]. After a complete evaluation of validity and reliability of Smith-Falvo scale compared to other scales, we decided to use this questionnaire in our study.

Subject and Method

This cross-sectional study is conducted in Namazi Teaching Hospital, Shiraz between October 2017 and February 2018. Target population is hospitalized patients in internal, pediatrics and surgery wards, and based on sample size calculation formula, 227 patients were selected. Sampling performed by random numbers table, to get calculated sample size, 321 patients hospitalized in three wards of internal, pediatrics and surgery were screened and finally

227 patient questioned by a questionnaire. In case of children, mentally handicapped, and people with low level of consciousness, interview is conducted with the patient's mature and adult escorts. All ethical consideration in the different stages was considered. Research proposal brought up in the medical school research council and evaluated in terms of scientific perspectives and ethical issues. The study began after approval of ethics committee of Shiraz University of Medical Sciences and data collection was done by 17 questions taken from Smith-Falvo questionnaire (Figure 1) which were selected and customized to the cultural and religious concerns of the society. Anonymous questionnaires prepared, and patients were justified by physician about the nature of research goals. However, information was recorded after taking written informed consent from the patients while they had right to participate in the study freely. Each patient interviewed for an average time of 25 minutes, and information recorded by a physician. In order to respect privacy of patients, interviews conducted in a private room and in coordination with the wards officials, and patients ensured about the confidentiality.

First part of the questionnaire included demographic questions about patient gender, patient education, physician gender and hospitalization ward. Second part included 17 questions about different aspects of patient's satisfaction with physician in a 5 part scale format as follows:

5=Strongly Disagree	*4= Disagree*	*3= Not Sure*	*2= Agree*	*1=Strongly Agree*

Meanwhile, sentences with the contexts of patient's satisfaction with physician in different areas were scored inversely. Questionnaire used in this study is taken from Smith-Falvo job satisfaction questionnaire and is customized to the desired target population characteristics. Content validity method is used to validate the questionnaire by faculty members. For internal reliability and Cronbach's alpha, obtained validity coefficient is equal to 0.955 for individual satisfaction questionnaire.

SPSS 19 statistical software is used for data analysis. In order to extract patient's satisfaction with his/her physician, we selected a good combination of questions indicating patients' satisfaction, using factor analysis with varimax rotation. However, to evaluate the relation between the patients' gender and their satisfaction about the questionnaire, we used t-test, and for evaluating the relation between education level and hospitalization ward, physician gender and satisfaction with physician, Kruskal-Walis and Mann-Whitney tests were used respectively.

Result

321 patients requested to fulfill the questionnaire but 94 case declined to complete the questionnaire or the questionnaire was not properly completed (figure 2).

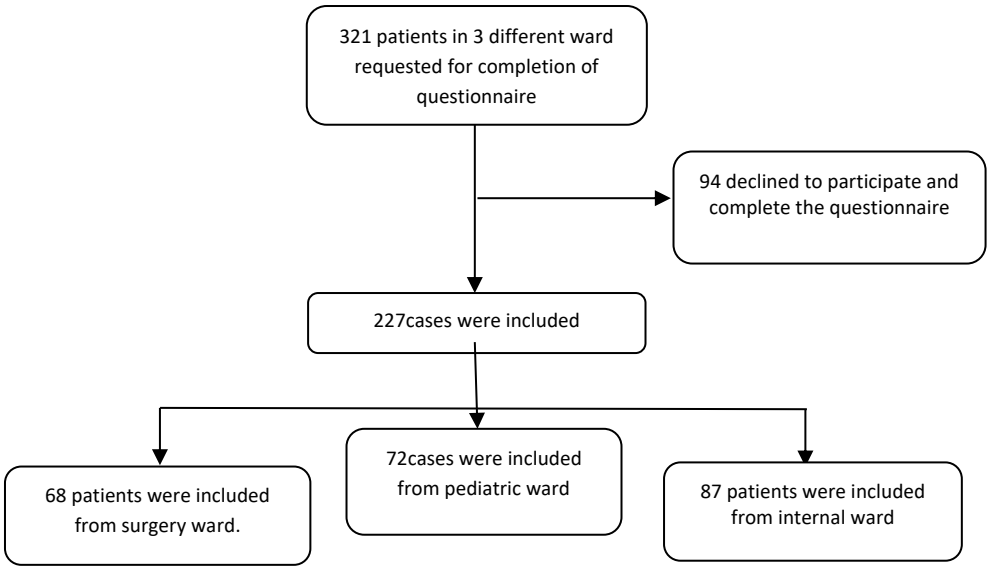

Figure 2: Flow diagram of patient enrollment and allocation to study.

Table 1 shows the demographic data and information about patients from different wards who completed the questionnaire.

Table 1. Demographic data and other characteristics of the patients.

Variable	Number	Percent
Sex		
Male	115	50.7%
female	112	49.3%
Ward		
Surgery group	68	29.9%
Pediatric group	72	31.7%
Internal ward	87	38.3%
Frequency of subgroup in surgery group		
Urology ward	24	10.6%
General surgery	38	16.7%
Orthopedic ward	6	2.6%
Education		
Uneducated	119	52.4%
High degree or lower school degree	49	21.6%
High school diploma	41	18%
Academic education	18	7.9%

In a detailed evaluation of Smith-Falvo questionnaire it turned out that highest score of patient's satisfaction was for question number 5 (m=4.56), question number 6 (m=4.53) and question number 2 (m=3.94). 98 patients were disagree or strongly disagree about the fact that physician ask very personal questions (question number 5)and Only 3.4% was believed that physicians did not examined them well in details with full concentration (question number 6). 87.3% of patients were agreed and strongly agreed about physician's warm greeting and welcoming with the respect (question number 2).

The lowest score was related to the question number 8 (3.25%), question number 7 (3.37%)

and question number 3 (3.94%). 36% of the patients said that physician didn't inform them about suggested treatments and the reasons for that approach (question number 8). 31.3% believed that physician didn't explain about the possible issues that may arise during the examination (question number 7). 55.4% of patients stated that physician used terms and expressions that have been unfamiliar for them (question number 13).

There wasn't a meaningful difference between average score of satisfaction for men and women. But there was a meaningful difference for the questions of "physician greeting me warmly" and "physician asked personal questions," p=0.02, p=0.04 respectively. In both cases men had more satisfaction with the physician compared to women.

There was not a meaningful difference between total average of satisfaction and patient's education. But for questions of "physician asked very personal questions", "physician blamed me for not taking a good care of myself", "I will recommend this physician to my friends" and "I will come back to visit this physician for my future health care" there were a meaningful relation between education and the answers such that we see p=0.02, p=0.04, p=0.01, p=0.049 respectively.

In questions 15, 6, 5 patients with high school degree and lower education level have the highest average of satisfaction compare to other groups. In case of question number 16 the highest satisfaction belong to diploma education level group and in question number 17 patients with academic education had the highest satisfaction.

There was not a significant difference between patient with female physician and patients with male physician statistically, but in questions "physician asked very personal questions" and "physician examined me carelessly" there was a significant difference,(P=0.01), (P=0.02) respectively. Patient with male physician stated that the physician examined them more carefully and also had less report in case of asking personal questions compared to patients with female physician.

The Kaiser-Meyer basis was 0.92 in this study which is a sign of adequate sample size for using factor analysis. The higher scores of satisfaction factor extracted by factor analysis are sign of more satisfaction and lower scores are sign of less satisfaction of patients. Total satisfaction score of participants in questionnaire vitiate in range of 0.01-4.31, mean and standard deviation of patient's satisfaction for surgery, pediatrics and internal wards were 0.96±0.26, 0.95±0.15, 0.98±0.4 respectively. There is a significant difference between average of total satisfaction and the ward (P=0.01). As illustrated in figure 3, level of satisfaction in wards divided into four groups of *very poor*, *poor*, *average*, and *good*. In surgery ward average and good satisfaction levels had the highest values. Total patients' satisfactions in average and good levels for pediatrics were lower than surgery ward. Satisfaction in poor level in internal medicine ward was more than the others, and the only ward with very poor level of satisfaction was internal medicine.

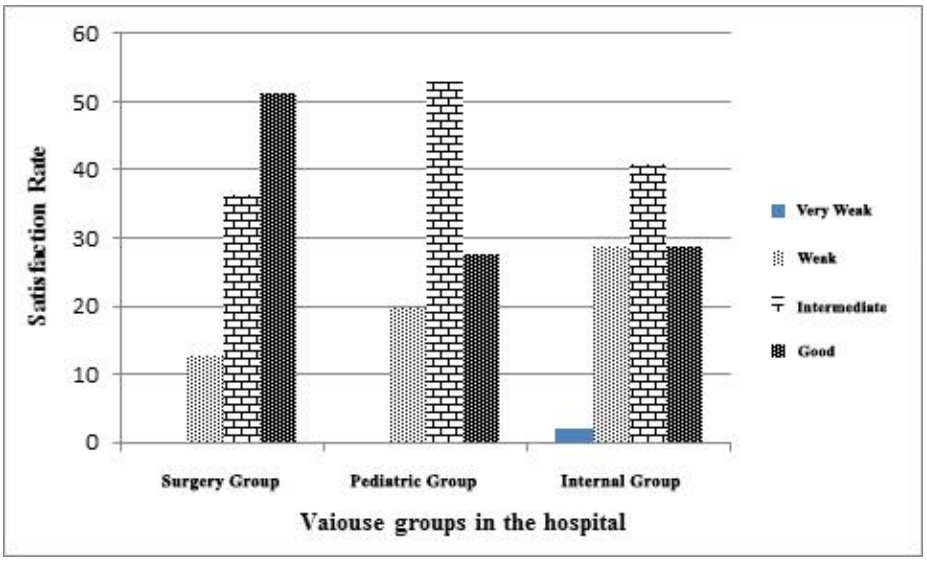

Figure 3: Patients satisfaction with physicians in various ward.

There was a significant relation between hospitalization ward and patients' satisfaction in all questions except for two questions of "physician haven't considered a proper and realistic treatment for me" and "physician considered my individual needs and condition in his treatment" ($P<0.05$).
Also it was a significant relation between education level of patient and recognition level of their physician after data analysis ($p=0.037$), such that uneducated patients knew their physicians' less than the others. There was not a significant relation between patients' gender, physician's gender and the hospitalization wards to recognize the physician by the patients.

Discussion

After conducting this study and using the Smith-Falvo questionnaire for evaluating patient's satisfaction, and with a detailed analysis of each and every question, we achieved useful information for improving patient's satisfaction by teaching behavioral skills to the future physicians in order to gain high quality of treatment, on the other hand, this study had limitations, one of the limitations was differences in cultural, accent and educational level that lead to lack of proper justification of patients about the study's goals. In some cases researcher had to spend more time to explain goals and meanings of the questions.

A positive patient-physician relationship has always been a high priority issue in health care systems. Physicians are always respected and known as a great source of sense of motivation, confidence, and trust, Considering the fact that the most complains from physicians are related to the communication issues and not the theoretical knowledge and clinical skills, which highlights the importance of this subject [1]. Protecting patient's privacy is a principle in medical professional, respecting patient's privacy leads to an effective interaction between patients and physicians and patient's calmness and also has a direct impact on patient's satisfaction. Violating patient's privacy has bad consequences like avoiding to explain medical history, not cooperating with physician in physical examination, increasing stress and behaving aggressively [22, 23].

Cultural and social parameters impact the definition and understanding of the privacy. We should not neglect the importance of these factors in our approach to the patients. In western countries, importance and respecting the patient's privacy is defined as a principle and is being described as an initial need for the patient

[24]. Also in our country by practicing religious principles and match them with medical sciences, a deep view to the patients' privacy has been conducted.

Patient's privacy has two aspects including *personal privacy* and *information privacy* [25, 26]. Leino-Kilpi et al. stated that patients' privacy includes *physical, mental, social* and *informational* aspects [27]. In this study, we evaluated the patient's satisfaction of respecting his privacy by physician in treatment period by asking the question of "did the physician ask you very personal questions" in questionnaire. We observed that 98% of patients disagreed that physician asked very personal questions and this satisfaction was more in male patients. Also patients satisfied by the fact that male physicians asked less about the personal issues compared to female physicians. This indicates a high level of patient's satisfaction with respecting their privacy by physicians. In another study, Ghasemi-e-vushani reported a high level of patient's satisfaction (57.5%) in respecting their privacy by physician [28].

In Dehghan and et al. research, patient's satisfaction in respecting personal privacy was not in a desired level, 50.6% was in the weak and intermediate level (33.9% in intermediate level), and49.4% in good and relatively good level [29]. Also based on report that published by Malekshahi, privacy of only 10% of patient was respected completely [30]. In evaluating of the 120 women hospitalized in one of the Tehran university hospitals which performed by Azadi, most of patients requested full implementation of matching medical science with Islam sharia laws and were in a poor condition in terms of respected the privacy [31].

Karro et al. stated that in emergency department in 33% of patients, definitely, and in 35% of patients, possibly, violation of privacy has occurred [32]. Barlas et al. reported that patient's privacy is respected in high level in 85.2% of patients [33]. Results from various researches show that there is a direct relation between respecting privacy of patient and their satisfaction, such that violating this fact as an ethical principle will cause lack of trust and satisfaction of patient with physician and will disturb treatment process [34]. Yara and Wash reported the outputs that indicate that respecting patient's privacy puts the patient in a calm state [35].

In this study we mentioned about the relation between patient's gender and respecting privacy and claimed that men were more satisfied in general. In the same context, Parrot et al. find out that violation of privacy in women is more than men and also higher need in respecting privacy of female patients compared to male is reported by Black Wikblad's study [36].

In a research performed in England, women had more undesired feeling about violation of privacy [37]. But in Heydary's research there wasn't a meaningful relation between patient's gender and reserving their territory and results from Dehghan and Aghajany reports also agreed to this argument [29].

Considering all mentioned studies, one possible reason for this finding in our study might be related to cultural and social conditions, rules of the society. Iranian Muslim females always unintentionally are more sensitive about violation of their privacy because of cultural and religious view points of the society and therefore have more limited privacy rather than men for themself. However this kind of sensitivity has also been seen frequently in women of western counties.

Patient's satisfaction with respecting their rights and privacy has a direct relation with education level and their expectation. In our study, patients with academic education had the lowest satisfaction about the question of "did physician asked very personal questions" and the highest

satisfaction was in group with diploma or lower education. This difference indicates that by increasing patient's education and social level, their sensitivity and expectation of their rights and privacy increases. Therefore to satisfy these patients, health care system should apply more policies and do more planning.

Patient-physician communication has been a challenging issue in patient's satisfaction and it consists of any kind of vocal or non-vocal communication that physician can use in order to obtain information from patients.

Patient-physician interaction as a two-way relationship is affected from both side's expectations and any type of unfair judgment and expectation leads to failure of communication. Therefore, during the treatment, patient should feel that he/she is treated respectfully, and his/her physician is a competent person and uses his/her maximum effort and knowledge for patient's benefit. Patient's expectations are beyond clinical skills of the physicians such that in patient's mind, physician should be a polite, kind, honest and enthusiastic, and always his/her outfit and behavior should be professional and determine his/her vocal and non-vocal skills in a high level. Having a nice attitude, making eye contact and reviewing significant events in the patients' life are the requisites of an effective clinical approach [38].

In this study, by evaluating the patient's answers to the question of "physician greeted me nice and cheerfully" a high satisfaction among the patients has been observed. While in a qualitative study in terms of patient's experience about professional approach of physician conducted on patients hospitalized in surgery and internal wards in two teaching hospitals of Isfahan, and some negative experiences were observed due to the lack of patient's trust to the physician, which was in turn was caused by him/her cold behavior with the patient and not being patience in listening to the patients sayings [39].

Wofford et al. in medical school of the North Carolina University evaluated patient's complaint from their physician's professional attitude and found out that in 18% of cases, the most important factor in untrusting the physician was the cold behavior of physician with patient [40]. Also in an evaluation performed by Schimittdiel et al. gender match was analyzed in patient's satisfaction(41) and although there was not a clear difference between gender match and providing the first medical care, but among 50% of patients who have chosen their physician, a significant relation observed between the physician's gender and patient's gender. Patients who selected a physician with opposite gender had more satisfaction with their physician, lowest score was related to the women who had selected a female physician and the highest score was related to men who has selected female physician [41].

It can be said that female patients has a higher level of communication skills compared to male patients and also have a higher tendency to select female physicians, therefore female physicians must try harder to satisfy the expectation of these patients. Although we haven't considered effect of gender match on patient's satisfaction in our study, but this issue can explain the lower satisfaction of female physician in conducting a warm relation, and has potential for further discussion in future studies.

Informing the patient is considered as a subset of patient's professional expectation from physician and is one of the principles in patient's satisfaction. The qualitative study of Wofford et al., showed complaints of not giving adequate information on diagnosis and treatment process [40], Firoozabadi et al. in their evaluation was indicated that most of patient was dissatisfied by lack of sufficient explanation about cause and

precaution of illness in a way that patient fully understands the situation [39].

In a review paper done by LiverlinVerlinc et al. it is noted that there is a direct relation between social level of patients and exchange of information between patient and physician(42). Physician contacts with patients in a lower social level in terms of income, education and job is directive, where physician is the main pivot and the only one who asks questions and patient has no control in discussion. In fact it can be said that patients with a lower social level has a lower knowledge about health care. Therefore understanding of special events that relates their health and sickness would be out of their control [42]. This is an answer that can confirm the issue in which patients with lower social level have a lower participation in discussion related to their sickness.

Street et al. stated in their study which was conducted in such a way that social level of patients were evaluated based on their education, and as a result more educated patients received more information about diagnosis and treatment [43]. In study of Devoe et al., social level of patients evaluated based on family income and education level. In this study stated that patient's understandings about communication in health centers is widely different based on their individual characteristics, such that poorer patients mostly complain about the fact that treatment team did not give them understandable explanation about their problem [44].

Fiscolla et al. in their study evaluated the effects of education level on examination by family physician. Time spent for clinical examination for the patients with lower education, was a little more than time spent for speaking with patient with higher educational level[45]. In the our study there wasn't any information on job type and monthly income for categorizing social level and only patient's education level was available, therefore our indicator is education level only. Most of the patients complained about the fact that physicians didn't explained about suggested treatment and possible issues that may arise during examination of them, also they stated that physician used terms and expressions that have been unfamiliar for them. Considering the fact that most of the patients were the people with low level of education (high school and diploma), we can argue that one factor of dissatisfaction is their low education, because during examination of these group of patients, physician has to spent more time over physical examination and physician is not able to answer all patient's questions, therefore this can be lead to dissatisfaction, but this dissatisfaction is not only resulted from low social level of patient, but professional attitude, communicational skills, and physician knowledge play an important role. There is a potential for further discussion in future study in this area.

In patient-physician communication, one of the key parameters with a high importance in diagnosing, treatment, and accountability is the physician's patience. Patience in communicating with patient, actively listening during visit, and answering nicely to questions are very effective in diagnosis and treatment process. In contrast, hastily visit and just stamping the transcript are negative experiences which sometimes patient faces in health care systems [39].

In study performed by Firoozabadi et al. in Isfahan, patient complained about physician interrupting their conversation and examining them hastily [39]. Farid Khalib in a systematic review in Malaysia where they evaluate gaps in patient-physician, find out that physicians interrupt patient's conversation each 18 seconds and only 23% of patients could complete their conversation [46]. In study performed by Moazem in Isfahan, not allocating enough time to patient by physician was one of the main dissatisfactions factors [47].

However, in our study most of the patients were satisfied with not being visited hastily and carelessly. Some of negative experiences which are being reported in country or around the world, make us to think that maybe still professional ethics is not perform completely by the physicians. However, physician role cannot be neglected due to fatigue from hard work, stressful job and large number of patients that must be visited. . Improving this condition needs more attention from officials in charge to improve educational and health care policies to provide desired services to patients.

Physician's Loyalty level also affects the patient's satisfaction. Patients with higher understanding will be more satisfied by provided services and will be more probable to revisit their pervious physician, and they have fewer tendencies to change their physician. These patients will also recommend their physician to others [48].

In our study there wasn't a statistically meaningful relation between educational level and total satisfaction but their understanding from provided services will increase. Patients with lower education usually have irrational and unreasonable expectations from health care system, beside this level of expectation, their understandings of provided services is low due to low education level, maybe appears in our study by high number of positive answers from patient with diploma or beyond to the questions of "I will recommend this physician to my friends" and "I will visit this physician for my future care".

In the present study patient's satisfaction in surgery ward in terms of professional contact of physician, patient-physician communication, physician's patience and his/her attention to patient, respecting privacy and not asking personal questions, physician's precision in examination, and providing adequate explanations about illness and reasons of proposed treatment, was more than other wards. In other words, patient's satisfaction in surgery ward was highest, pediatrics was the second and internal ward was in the third place.

In this study effective parameters like gender distribution of patients and physicians, patient-physician gender match, education level of patient, social and economic level of patients, illness type, and time of hospitalization in surgery, pediatrics, and internal wards wasn't separately evaluated. Nature of illness, time of hospitalization in hospital and age of the patient were most important factors in their satisfaction with physicians.

Conclusion

We concluded that with respect to the daily increasing of patient's satisfaction importance and patient-physician communication for quality improvement in healthcare organization, promoting the approaches that matches cultural and religious concerns to achieve the maximum satisfaction in health care system is essential. Statements are not enough to achieve this goal, but beside these, necessary training for care service providers and medical students should be provided. Providing educational program to health care systems employees for respecting patient's rights and evaluating these systems by managers is also essential. More researches are needed to evaluate barriers in providing services with higher quality and making proper communication between treatment team and patient.

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		Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree	Doesnot Apply
1	The doctor went straight to my medical problem without first greeting me.	1	2	3	4	5	
2	The doctor greeted me pleasantly.	5	4	3	2	1	
3	The doctor seemed to pay attention as described my condition.	5	4	3	2	1	
4	The doctor made me feel as if I could talk about any type of problem.	5	4	3	2	1	
5	The doctor asked questions that were too personal.	1	2	3	4	5	
6	The doctor handled me roughly during the examination.	1	2	3	4	5	
7	The doctor gave me an explanation of what was happening during theexamination.	5	4	3	2	1	
8	The doctor explained the reason why the treatment was recommended for me.	5	4	3	2	1	
9	I felt the doctor diagnosed my condition without enough information.	1	2	3	4	5	
10	The doctor recommended a treatment that is unrealistic for me.	1	2	3	4	5	
11	The doctor considered my individual needs when treating my condition.	5	4	3	2	1	
12	The doctor seemed to rush.	1	2	3	4	5	
13	The doctor behaved in a professional and respectful manner towards me.	5	4	3	2	1	
14	The doctor seemed to brush off my questions.	1	2	3	4	5	
15	The doctor used words I did not understand.	1	2	3	4	5	
16	The doctor did not give me all the information I thought I should have been given.	1	2	3	4	5	
17	The doctor criticized me for not taking care of myself.	1	2	3	4	5	
18	I would recommend this doctor to a friend.	5	4	3	2	1	
19	Iwouldreturntothisdoctorfor future healthcare.	5	4	3	2	1	

Figure 1: Modified Smith-Falvo questionnaire.