



Assessment Patients' Satisfaction Related on Quality of Care: A Cross-sectional Descriptive Study

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Authors' contributions

This work was carried out in authors collaboration. Authors MRH, HAP and RN designed the study, wrote the protocol, wrote the first draft of the manuscript and managed the literature searches. Authors ET and BŞ managed the literature searches and authors MRH, HAP and RN managed analyses of the study. All authors read and approved the final manuscript.

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ABSTRACT

Patient satisfaction has become increasingly popular and assessment of patient satisfaction is an important tool for monitoring the quality of care in hospitals. The aim of this study was to assess patients satisfaction related to quality of care and factors affecting this. This cross-sectional descriptive study was conducted at a university hospital in Tehran, Iran. In this study, 500 patients were randomly selected and their satisfaction was measured by a standardized questionnaire. Data collection was done during four months period before the discharge process. The study results showed that there was a directly relationship between nurses caring and the patients' satisfaction. The most satisfaction reported was regular health checks by nurses at day shift (4.69 ± 0.67) and the least satisfaction was related to hospital payment (1.20 ± 0.16), respectively. There was a significant correlation with overall satisfaction between insurance status and marital status ($P < 0.05$). The results indicate that periodic patient satisfaction survey should be institutionalized to provide feedback for continuous quality improvement.

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1. BACKGROUND

To evaluate and improve the quality of care provided is important to investigate in the context of health care. Patient satisfaction, that is, the degree of congruency between patient expectations of ideal care and their perceptions of real care received is a significant indicator of the quality of care [1-7]. To improve the quality of nursing care, nurses need to have an understanding of the factors that influence patient satisfaction [8]. Measurement of patient satisfaction is a legitimate indicator for improving the services and strategic goals for all healthcare organizations [9-12].

Empirical evidence related to patient satisfaction in the context of health care, has found that patients' were not satisfied about nutritional status, length of hospital stay, cost related to long stay in hospital, hygiene, health care facilities, and supply of medicines from the hospital pharmacy. However, it was found that patients were satisfied with nurse's and physician's behaviors and delivery of care. The reviewed literature agreed on the fact that there is an impact of measuring patient satisfaction on quality improvement of care. Patients' evaluation of care is a realistic tool to provide opportunity for improvement, enhance strategic decision making, reduce cost, meet patients' expectations, frame strategies for effective management, monitor healthcare performance of health plans and provide benchmarking across healthcare institutions [13-18]. In order to understand various factors affecting patient satisfaction, studies have explored various dimensions of the perceived service quality, as meaningful and essential measures of patient perception of healthcare quality [18-20]. The aim of this study was to evaluate patient satisfaction and identify factors affecting patient satisfaction within an acute care setting.

2. MATERIALS AND METHODS

This cross-sectional descriptive study was conducted at the different wards of Shahed university affiliated hospital, Tehran, Iran. The study sample included 500 patients that were randomly selected. The inclusion criteria were: patients who had volunteered to participate, older than 18 years of age; admitted to the hospital for a minimum of 24 hours; and mentally competent to provide consent. The researchers obtained informed consent from all patients after

explaining the aims of the study. Following receipt of informed consent, patients completed the sociodemographic and modified questionnaires. For the collection of data, modified socio-demographic, patients' satisfaction in terms of hospital units (Table 1) and patient's satisfaction in terms of patient's satisfaction of nursing services (Table 2) questionnaire were used. The items were derived from the findings of previous studies. Content validity was established by examining the current literature on patients satisfaction, and by sending the questionnaires to expert panel. A total of ten registered nurse consented to participate in the study as expert panel members. Each expert panel member evaluated the items for content validity on a 4-point scale and scores for each item were calculated greater than 0.6. Patients' satisfaction was assessed in terms of the hospital units consisted of information about emergency, discharge, non-nursing staff and other services, accounting, clinics, reception, nurses, physicians, hospital environment and facilities, and nurses' behaviour, care delivery, skills, and health assessments. The questions were scored in a likert scale (0-5) (not approach=0, quite dissatisfied=1, dissatisfied=2, no comment=3, satisfied=4, completely satisfied=5). Patient's satisfaction was divided in two classifications: Satisfied and dissatisfied. Scores ≤ 3 was considered as dissatisfaction and scores > 3 was considered as overall satisfaction.

2.1 Statistical Analysis

Data collected was entered into Statistical Package for Social Sciences (SPSS) software version 16.0 and used for analysis. Descriptive statistics such as frequency, percentage and mean and standard deviation were used to summarize quantitative variables. To assess correlation between patient satisfaction and socio demographic characteristics chi square test were used. P values (<0.05) were considered significant.

3. RESULTS

Study results showed that 60.8% (n=196) of patients were female. 75.5% (n= 375) were married and 33.8% (n=155) had a history of hospitalization. For 64.7% of patients, the hospital's reputation was the important factor in their decision and 83.4% of patients stated that there were no empty bed for hospitalization when

they come to the hospital. Additionally, 66% of patients mentioned that feeling well during discharge and 55% of them satisfied of length of hospitalization. The study results showed that there was a directly relationship between nurses caring and the patients' satisfaction. The results of patients' satisfaction according to hospital units showed that the high satisfaction was related to nursing services (4.69±0.67) and the least satisfaction was related to hospital payment (1.20±0.16) (Table 1). The results of patient's satisfaction of nursing services showed that most patient's satisfaction of nursing services was with regular health checks by nurses at day shifts (4.69±0.67) (Table 2). The results of correlation between patient satisfaction and socio demographic characteristics showed that insurance status (P=0.006) and marital status (P=0.009) had significant correlation with overall satisfaction.

4. DISCUSSION

Following increased levels of competition and the emphasis on consumerism, patient satisfaction has become an important measurement for monitoring health care performance of health plans [21]. Patients' expectations regarding health care is a key factor when it comes to satisfaction with nursing care. Several factors influence patient expectations both before and during care [22]. Patient characteristics such as age and education may influence patient's level of satisfaction [23,24]. Patients' age and sex were important factors related to perception of

satisfaction with the nursing care provided. Quality measurements focusing on the patient's perspective demonstrated that older people and men rated the quality of care higher. Patients with a higher level of education reported less satisfaction compared with those with less education [22].

This study did not find a statistically significant correlation between patients satisfaction and age and sex. However, some studies showed correlation between patient's satisfaction and age [15,25,26]. Noohi [16] reported older people were less satisfied of health services [16]. Whereas, Kohan [24] showed more satisfaction with medical and nursing care with older adults [27].

Nurses' communication is the most important behavior in caring the hospitalized patients. Improvement in nurse-patient communication have a positive effect on patients' feeling of being respected. Studies showed that positive nurses behaviors could improve the patients' attitude to health care and their satisfaction and patients' education level could improve interaction between nurses and patients during hospitalization [28]. This study did not find a statistically significant correlation between patients' education level and satisfaction related to nursing cares; which is consistent with a study conducted in Cyprus [29]. However, findings in the literature has shown a significant correlation between patients' education level and satisfaction of nursing services [14,15,19,25,30].

Table 1. Patients' Satisfaction in terms of hospital units

Units	Subjects	Mean ±SD
Emergency	The rate of adoption records	4.53±0.65
	On-time attendance of emergency physician	2.82±1.06
Discharge	guidance on continuing care	4.03±0.07
	Rate of discharge process	3.88±0.08
Other services / personnel	Guards' help/guide to different parts of hospital	3.96±0.11
	Guards' behavior	3.79±0.28
Accounting	On-time attendance of insurance agent	4.06±0.70
	Hospital payment	1.20±0.16
Clinic	Clinics physicians' behavior	4.25±0.09
	Clinic staff behavior	4.07±0.09
Admission	Distances between wards from admission unit	4.42±0.33
	Admission staff behavior	3.25±0.84
Nursing	Regular health checks by nurses (day shift)	4.69±0.67
	Nursing skills	3.25±0.77
Physician	Humanistic behavior of physician	4.43±0.62
	Medical student behavior	2.62±1.19
Hospital environment & Facilities	Cleanness of hospital food dishes	4.13±0.46
	Cleanness and temperature of room	2.84±0.83

Table 2. Patient's satisfaction in terms of nursing services

No	Nursing services	Mean \pm SD
1	Guide of patients by nursing staff	4.08 \pm 0.06
2	Nurses respond questions	4.43 \pm 0.41
3	Nursing behavior at night shift	4.22 \pm 0.40
4	Nursing behavior at day shift	4.50 \pm 0.48
5	Timely care by nurse (night shift)	4.02 \pm 0.00
6	Timely care by nurse (day shift)	3.52 \pm 0.50
7	Nursing skills (injections, dressings, IV catheters, etc.)	3.25 \pm 0.77
8	Regular health check by a nurse at night shift (record temperature, blood pressure, etc.)	3.53 \pm 0.49
9	Regular health check by a nurse at day shift (record temperature, blood pressure, etc.)	4.69 \pm 0.67
Total (mean \pmSD)		4.03\pm0.94

This study showed that the important factor to choose Shahed Medical Affiliated Hospital was reputation of its physicians. Studies showed that reputation of physicians was one of the important reasons for choosing hospital by patients [31], [32]. According to the results of present study, the most satisfaction was related to nursing services and the least was for accounting unit which was consistent with some studies [1,5]. Satisfaction with the rate of adoption records in emergency unit was good. But satisfaction with on-time attendance of emergency physician was low. Some studies showed the high satisfaction of emergency units at Iran hospitals, but they did not show satisfaction in detail [17,33-36]. Some investigations report that the most factor for patients dissatisfaction was prolonged waiting time of emergency services [37-39].

At present study, high satisfaction with hospital clinics was reported. The least satisfaction was physicians or clinic staff behaviors. In a study at a medical affiliated hospital in Tehran, 75% of patients had satisfaction of clinics units [40]. In the present study, the most satisfaction was physical distance between different wards from the admission unit and the least satisfaction was admission staff behaviors. In a study, the existence of the waiting room, guide signs, and welcoming by a staff, substantially led to increasing the satisfaction from 49% to 83% in 2 years of follow-up [41]. High satisfaction with nursing has been reported in some studies at affiliated hospitals of different cities in Iran [19,20,42-44].

The surrounding physical environment had an influence on patient satisfaction. The patient

made suggestions for improvements, such as more single bedrooms, a maximum of two patients per room and a special room for postoperative care. Clean clothes, a clean bed and tasty food were considered to be tokens of good nursing care. Further cutbacks in areas not related to the immediate care, such as cleaning routines, also had an influence on the patient's satisfaction with the hospital stay [22]. At present study, the least satisfaction of hospital environment and facilities was in cleanness and temperature of room. Also, the most dissatisfaction was reported in one medical affiliated hospital related on dress and laundry facilities [45]. Results showed high satisfaction with humanistic behavior of physician. Also, some studies showed high satisfaction from physicians' behavior and responses [14,20,46]. A study results showed that the most of satisfaction with physician were conversation by patient during the examination, complete description of the diagnosis and treatment and keeping patient privacy [47]. Clear communication is a prerequisite for the patient's perception of satisfaction with the nursing care. It is important that the nurses' explanations is clear and straightforward, so that the patient could understand what they are talking about. Personalized nursing care resulted in improved communication, increased patient involvement and a better outcome. The more attention the nurse paid to the patient, the greater the perception of satisfaction. In addition, patient satisfaction was influenced by the nurse's behaviour and nursing qualities [22].

The most satisfaction with hospital guards was "help/guide patient to the different parts of the hospital" and the least satisfaction was "guard's

behavior". Similarly, some studies have reported low satisfactions of non nursing personnel and other services [25,48]. The most satisfaction with the accounting unit was "on-time attendance of insurance agents before discharge" and the least satisfaction was about "how to pay the hospital costs". Similarly, at a study the most dissatisfaction was about costs of treatment [46]. Regarding to hospital environment and facilities, the most satisfaction was about cleanness of food dishes. But patients were dissatisfied with room cleanness and temperature. Also, some studies have reported lower satisfaction with the facilities [5,47]. Assessment of patient's satisfaction helps managers of hospital to improve their services. It has become increasingly important to systematically measure patients' satisfaction with their care and other presented services. Measuring patient satisfaction involves evaluating patient's perceptions and determining whether they felt that their needs were adequately met. Health care staff awareness about needs and wants of their patients as well as physician-patient interaction significantly affect the patients' satisfaction [49]. It has also been reported that the interpersonal communication and technical skills of health care provider are two unique dimensions involved in patient assessment of hospital care. Interpersonal skills were as influential as or more influential than clinical competence on patient satisfaction [23]. Regarding to findings, it is necessary to improve behavioral considerations between hospital personnel with patients. Hospital staff behavior with patients especially in crowded places such as admission unit can be an important challenge. Admission unit have an important and sensitive position, because it is considered as a bridge before and after hospitalization to other hospital services. It seems some staff or medical students cannot maintain interpersonal interaction with patients effectively. Therefore, orientation are necessary for this problem. On the other hand, more efforts to reduce the discharge process, and upgrade the clinical skills of nurses by focused service training are emphasized. However, to determine the efficacy of activities, it is suggested to conduct similar investigations in different periods.

5. LIMITATION

This study was conducted with a small amount of patients in Tehran. The result cannot generalize.

6. IMPLICATION TO PRACTICE

It is important to give patients information about what to expect from nursing care at hospitals. The public health nurses and social workers should inform hospital administrators of what the patients and their relatives can expect from hospital nurses and what demands they can place upon it that provide good quality of care.

7. CONCLUSION

The results indicate that overall patient's satisfaction of hospital services was appropriate and a more careful planning of health services is recommended to increase satisfaction.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee of the Shahed University in Tehran. Written approvals were obtained from the Shahed University Institute of Health Sciences, Ethics Board of the Shahed University Midwifery and Nursing Faculty, and Shahed university affiliated hospital director. Written and verbal informed consent was obtained from all patients after explaining the aims and protocol of the study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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