

Comparative Study of Patients' Satisfaction with Nursing Service in Major Units of Selected Training Hospitals in Tehran

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Abstract

Background: A patient's satisfaction with nursing service is one of the main indices for measuring the quality and effectiveness of health care.

Objective: The purpose of this study was to investigate and compare patients' satisfaction with the nursing service provided in selected training hospitals in Tehran.

Methods: This cross-sectional study was conducted in 2013 using Patient's Satisfaction Standard questionnaire (PSI) in 7 selected training hospitals in Tehran. In this study, 336 patients discharged from 4 major units of each hospital namely internal, surgery, obstetrics and gynecology and pediatrics, were selected and studied randomly. Data were analyzed using the SPSS₁₈ software.

Results: The results of this study showed that the pediatric unit recorded maximum patients' satisfaction with nursing care with a mean and SD of 3.78±0.68, while the surgery unit recorded minimum satisfaction with a mean and SD of 3.35±0.65. Also, a significant difference was observed between patients' satisfaction with nursing service in major units such as internal, surgery, obstetrics and pediatrics (P=0.015).

Conclusion: However, significant differences were found in terms of degree of satisfaction with nursing service between the major units of the hospitals. These differences may be due to the characteristics of providing care, unit, patient or family. Therefore, future research should be conducted in order to identify the cause of the difference in satisfaction between the different hospital units.

Keywords: Patients, Satisfaction, Nursing Service, Hospitals

1. Background

Today, in a bid to provide service in a cost-effective manner, healthcare organizations are faced with important challenges due to the presence of competitive needs. This has caused economic, political, and legal motivations for health care providers to control costs by maintaining and enhancing the quality of healthcare services provided. An efficient health care system that provides desirable service can achieve its mission by providing quality health care services to community people. Also, to assess the system, its services need to be evaluated. Hospitals are considered as the most important and most effective health care institutions, as well as an important body that provides health services with continuous enhancement in the quality of health care provided [1, 2].

Patients' satisfaction is an important criterion for evaluating the quality of health care and provides health managers with important information in terms of meeting the needs, values and expectations of clients. However, by increasing quality-oriented and customer-based development in the health care sector of the country, through continuous feedback of patients' expectations and improvement of service provision, reforms in the quality of health care will be observed and the strengths and weaknesses of the sector can be determined [3].

Patients' satisfaction is an important index of health care quality, and is frequently used in the planning and evaluation of health service. Since a majority of health service providers are nurses, care provided by them plays an important role in the satisfaction of patients. The

importance of satisfaction in the health care delivery system has become essential as the experience of disease, the need for compliance and follow-up of treatment, and care process increases the vulnerability of patients and their need for comprehensive support [4-7]. In addition, patients' satisfaction plays an important role in reducing complications and complaints but increases treatment compliance, efficiency and effectiveness. The patient is the main body of service and the responsibility of the hospital. Hence, their satisfaction is considered as one of the important markers of health care quality [8].

Since the past three decades, the use of patients' opinions has been considered in order to improve on the provision of health care and at present, patients' satisfaction is one of the most important criteria for measuring the quality of health service provided [9]. Accordingly, a patient's satisfaction with nursing service is very important, and serves as a part of the patient's satisfaction with the treatment process [10]. Also, by interviewing members of the nursing faculty, managers and nurses working in hospitals, Tafreshi et al. stated that "standard service" and "a patient's satisfaction" influence other components in the definition of quality nursing service [11].

Receiving patients' opinions can create an opportunity to improve and advance organizational objectives. The patients' feedback provides accurate information regarding their expectations and how they perceive the quality of care received [12]. A patient's satisfaction with nursing care is also considered as an important index of quality and effective healthcare system, since a patient's judgment on

the whole hospital service may be based on his/her understanding of nursing care [13, 14]. In a study by Joolae *et al.*, a significant relationship was found between patients' satisfaction with nursing service and their satisfaction with the whole hospital service [14].

According to a patient's judgment, the quality of health care, particularly the quality of nursing care, is a subjective and unique phenomenon, in that factors such as unit leadership style, the method of nursing care and the ratio of nurse to patient in the hospitalization unit, diagnosis type, treatment method, previous experiences of a patient, education level, patient authorities, and communications between a patient and staff, may affect a patient's satisfaction [11-13].

2. Objective

Patient satisfaction is a complex phenomenon that is influenced by various factors, and is the reflection of patients' opinion on healthcare and service for managers, care providers and patients. Given the importance of a patient's satisfaction in the health system studied, the purpose of the present study was to compare patients' satisfaction with the nursing service provided in selected training hospitals in Tehran.

3. Methods

This is a cross-sectional study. The study population consisted of patients discharged from 4 major units (internal, surgery, obstetrics, and pediatrics) in 7 selected training hospitals in Tehran in 2013. Since there is no precise information on the level of population satisfied with the nursing service, the level of satisfaction was considered equal to 50%, to obtain the maximum number of samples. Therefore, using a sample size calculation formula and taking into account the statistical reliability of 95%, ($\alpha=0.05$) and accuracy coefficient ($d=0.055$), the sample size was calculated as 317 subjects. Accordingly, with about 95% confidence and error of less than 0.055, a sample of 317 subjects was required.

$$N = Z_{21-\alpha/2} P (1-P)/d^2 = (1.96)^2 (0.5) (0.5) / (0.055)^2 = 317$$

In this study, a total of 336 hospitalized patients who were discharged after being admitted for at least three days, were selected randomly from the internal, surgery, obstetrics and pediatrics units. The inclusion criteria include having full consciousness and appropriate physical-mental condition. Also, for children who could not answer questions, the questionnaire was completed by their parents or legal guardian.

Patient Satisfaction Instrument questionnaire (PSI), whose reliability and validity have been confirmed in previous studies, was used as a tool for data collection [15]. The questionnaire consisted of two main parts: The first part included patients' demographic characterizations (age, gender, marital status, education level, etc.); while the second part included some questions on a patient's level of satisfaction with care in three aspects: technical-professional, trust and patient training. Also, the questionnaire was divided based on the Likert scale (very poor 1, poor 2, appropriate 3, good 4, and very good 5).

The questionnaire was completed by direct conversation with the patients. The patients' informed consents were obtained before entering the study. Also, the patients were assured of the confidentiality of their personal information

in all steps of conducting the study and reporting the results. Finally, the data collected were analyzed using the SPSS software version 18 and F-ANOVA test.

4. Results

A total of 56.25% of the studied patients were male and 37.5% were over 60 years old. Moreso, 18.75% of the studied patients had higher education and 70.23% were married. Also, 27.38, 26.79, 26.79 and 22.02% of the studied patients were hospitalized in the internal, surgery, obstetrics and pediatric units, respectively. The patients' demographic characteristics are shown in [Table 1](#).

According to the findings of the present study, the levels of whole satisfaction of patients with nursing care provided in units of internal medicine, surgery, obstetrics and pediatrics with a maximum score of 5 were 3.52, 3.35, 3.59 and 3.78, respectively. The maximum level of patients' satisfaction with nursing care was ascribed to the pediatric unit with a mean and SD of 3.78 ± 0.68 . In addition, the minimum level of satisfaction was ascribed to the surgery unit with a mean and SD of 3.35 ± 0.65 .

Table 1. Demographic characteristics of patients

Demographic Variable	Status	n (%)
Gender	Female	147 (43.75)
	Male	189 (56.25)
Age	Under 20 y	84 (25)
	20- 40 y	70 (20.83)
	40- 60 y	56 (16.67)
	Over 60 y	126 (37.50)
Education	Illiterate	60 (17.86)
	Under Diploma	112 (33.33)
	Diploma	101 (30.06)
Unit	University	63 (18.75)
	Internal	92 (27.38)
	Surgery	90 (26.79)
	Obstetrics	80 (23.81)
	Pediatrics	74 (22.02)

The pediatric unit in all three aspects of satisfaction, including technical-professional, trust and patient education was demonstrated to have the highest level of satisfaction as 3.62, 3.81 and 3.91, respectively. Also, a statistically significant difference was observed between the level of patients' satisfaction with nursing service in major units including internal, surgery, obstetrics and pediatrics ($P=0.015$) ([Table 2](#)).

Table 2. A patients' satisfaction with nursing care in different units

Care Unit	Technical-Professional	Trust	Patient Training	Total
Internal	3.81±0.65	3.55±0.61	3.21±0.67	3.52± 0.64
Surgery	3.58±0.62	3.36±0.64	3.11±0.69	3.35±0.65
Obstetrics	3.21±0.71	3.75±0.61	3.81±0.67	3.59±0.66
Pediatrics	3.62±0.43	3.81±0.73	3.91±0.87	3.78±0.68
Test result	F=3.78 P=0.015			

5. Discussion

According to the results of the present study, in all studied units, the score of satisfaction with nursing service was higher than the average level (2.5). Accordingly, the status of satisfaction with nursing service was at a relatively desirable level. The results of this study are in line with the quantitative findings of Merkouris *et al.* [13] on the internal, surgery and general units of two hospitals in

Athens. In their study, the average total satisfaction of patients with nursing care was moderate. According to the findings of Liu and Wang [16], in units of internal, surgery, obstetrics and the elderly, the average satisfaction of patients with nursing care was 3.99 with SD of 0.84. Also, in a study conducted by Hajinezhad on internal and surgery units of the training hospitals of Iran University of Medical Sciences, it was shown that the average patients' satisfaction with nursing care was 3.39 with SD of 0.63. In this study, the scale of professional knowledge and skill had the highest score while patient training had the lowest [12].

In Seidi et al.'s [17] study, satisfaction with nursing staff service by patients hospitalized in the internal and surgery units of 2 Qom hospitals was 74%. According to the study of Azami and Akbarzadeh [18], 77% of the patients hospitalized were satisfied with the service provided by the nursing staff. Mogharab and Mahmoudi Rad [19] investigated the level of patients' satisfaction with nurses' training skills in the internal and surgery units of Imam Reza hospital in Birjand. In their study, it was found that 12.8% of the patients were highly satisfied with nurses' training skills, 56.8% were satisfied on average and 30.4% had low level of satisfaction. However, the level of satisfaction was higher in patients hospitalized in the surgery unit. In a study conducted by Shahri et al. [20] on units of internal, surgery, obstetrics, emergency and pediatrics in Sabzevar hospitals, in total, 92.41% of the patients were satisfied with the service provided in the centers, but the most satisfaction was ascribed to nursing staff. The findings of Joolaei et al.'s [21] study on clinic units of emergency and hospitalization in four hospitals that are affiliated to the University of Medical Sciences in Iran, showed that the total satisfaction of patients hospitalized was 68.7%, and the maximum percentage of satisfaction with nursing care was 85.1. Also, the study of Walsh [22] showed a relatively high level of satisfaction with nursing care, in which 59% of the patients reported satisfaction of over 90% with nursing care. In 2007, Joolaei et al. [14] conducted a study on training hospitals of selected cities in the country and showed that 39.7% of studied patients were satisfied with nursing service and 36% of them in general were highly satisfied with the service provided in the studied hospitals. The researchers reported a significant relationship between patients' satisfaction with nursing service and total hospital service.

In the present study, it was shown that the average patients' satisfaction with nursing care in pediatrics unit with a score of 3.78 ± 0.68 , was higher than other units. Thus, this can be attributed to ratios close to the standard "patient- nurse" or the method of providing care or the high sensitivity of a patient family in this unit. In some general units, such as the surgery unit, due to high working pressure (high ratio of patient- nurse), nursing staff can only have the opportunity to perform common tasks to a patient (investigating vital signs, acceptance, dressing, medication, visit, writing reports, etc.) regardless of patient-centered care. Under such conditions, there is no adequate opportunity to provide high quality care.

One of the limitations of the present study on patients' satisfaction with nursing service is that only 4 major units (internal, surgery, obstetrics and pediatrics) of hospitals were studied. More accurate evaluation of the status of patients' satisfaction with nursing service needs to consider all units. Also, in the present study, data were not analyzed according to the hospitals. Certainly, data analysis

according to the hospitals can have more useful information about the quality of care provided in a hospital, especially for managers of medical centers and other beneficiaries. Finally, it should be noted that a patient's satisfaction is a complex phenomenon and is influenced by different cultural, economic and social factors. Therefore, it is more important to identify factors affecting the level of satisfaction. In addition, investigating the status of satisfaction with care in each socio-economic group can provide more useful information. The aforementioned are considered as the most important limitations of this study.

6. Conclusion

The results of this study showed that although satisfaction with nursing care is at a relatively desirable level, it is still far from complete satisfaction. Increasing the technical and professional capabilities of nurses, promotes awareness in terms of patient-nurse mutual rights and increased patient's trust on medical staff, improved satisfaction with health care. However, significant differences were found in terms of satisfaction with nursing service between the major hospital units. These differences can be due to the characteristics of providing care, the unit, patient and/ or family. The cause of the differences and the contribution of each cause in the reduction of a patient's satisfaction should be considered in future studies.

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Authors' Contributions

All authors were involved in every stage of this study.

Conflict of Interest

The authors declared no conflict of interest.

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