

## Patient Satisfaction With Nursing and Medical Care in Hospitals Affiliated to Arak University of Medical Sciences in 2009

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**Background:** Patient satisfaction is essential and must be taken into account when decisions are being made about changes and enhancements to services.

**Objectives:** The aim of the current study was to assess patient satisfaction with the medical and nursing services provided to patients admitted to teaching hospitals affiliated to Arak University of Medical Sciences.

**Materials and Methods:** This was a cross-sectional study conducted in 2009. The study population consisted of all patients admitted to the study setting. The instrument consisted of a demographic questionnaire and patient satisfaction questionnaire. Study data were analyzed using Chi-square test, Pearson's and Spearman's rho correlation coefficient.

**Results:** In terms of the medical and nursing care provided, 67% and 69% of the participants were satisfied, respectively. The 'access to opportune nursing care' and 'physician's manner' items received 82.7% and 81.7% of scores, respectively. Satisfaction with medical and nursing care was significantly correlated with the participants' education levels ( $P < 0.05$ ).

**Conclusions:** The study showed that patient satisfaction was at an average level, therefore policy makers in the organizations should consider customer-based feedback and apply various methods to improve it.

**Keywords:** Patient Satisfaction; Nursing care; Iran

### 1. Background

Patient satisfaction is essential and must be taken into account when decisions are being made about changes and enhancement in services. It also is used as an instrument in determining payment rates, especially in the context of a competitive healthcare atmosphere and consumerism (1, 2). Nowadays, a survey of patients' satisfaction is an important indicator of healthcare quality. Patient satisfaction surveys may be performed in society as well as in healthcare systems, and they are considered to be key points in identifying health policy (3).

Many studies have been conducted in Iran and in other countries on patient satisfaction. A study by Cheng et al. was performed among 1 866 patients with myocardial infarction. The study showed that 7% of patients were satisfied with their health care. Sex and education levels showed significant relationship with patients' satisfaction. So that educated patients were less satisfied than uneducated ones (4).

Other researchers studied all services in educational hospitals in a national study. In total, 1 320 were selected in a descriptive-analytic study using multi-stage cluster sampling. Findings showed 36% of patients were highly satisfied, 49% were moderately satisfied, and 14.6% were dissatisfied with all services. However, 39.7% were highly sat-

isfied with nursing services while, 33.9% were moderately satisfied and 26.4% were dissatisfied with nursing services (5). Studies conducted in Iran have shown that patient satisfaction rates range from 50% to 90% (6, 7). As the care settings of different geographic areas differ significantly in terms of their quantity and quality of care, and as patient satisfaction is influenced by many personal, contextual, and socio-cultural factors, determining the rate of patient satisfaction in different healthcare settings is important to be assessed.

### 2. Objectives

This study was carried out to determine patient satisfaction with medical and nursing services in Arak's educational hospitals.

### 3. Materials and Methods

This cross-sectional study was conducted in 2009. The study population consisted of all patients admitted to five teaching hospitals affiliated with Arak University of Medical Sciences. The sample size was calculated based on the results of the Zolfaghari et al. and Bahrampour et al. studies (6, 7). Accordingly, with a type one error of

0.05 and a satisfaction mean of 50%, the sample size was determined to be 382. Then sampling was performed using a convenience method.

The instrument consisted of two parts, including a demographic questionnaire and a 14-item patient's satisfaction questionnaire. The demographic questionnaire included questions regarding the patients' age, gender, education level, insurance coverage, hospitalization ward, length of hospital stay, previous history of hospitalization, and place of residency. The patient satisfaction questionnaire (PSQ) consisted of two dimensions including satisfaction with medical care (6 items) and satisfaction with nursing care (8 items) and this was a self-administered questionnaire. The possible answers to the PSQ items were; 'not encountered yet', 'dissatisfied', 'fairly satisfied', and 'completely satisfied', which were scored from 1 to 4, respectively. The reliability of the PSQ was ensured by checking its internal consistency. Accordingly, in the pilot study 60 patients were asked to complete the questionnaire. Cronbach's alpha was equal to 0.86. Furthermore, the questionnaire's content validity was supported by a panel of ten nurses with master and doctoral degrees in nursing, who were working in both clinical and academic settings.

### 3.1. Ethical Considerations

A university-affiliated institutional review board approved the study. We explained the aim and the process of the study to the participants and guaranteed the confidentiality of their personal data. Participation in and withdrawal from the study were voluntary. All the participants signed an informed consent before taking part in the study.

### 3.2. Data Analysis

Data analysis was performed using the Statistical Package

for Social Sciences (13.0 version; SPSS Inc. Chicago, IL, USA). Chi-square test, Pearson's and Spearman's rho correlation coefficient were used for examining the correlation among the study variables.

## 4. Results

In total, 382 patients were entered in the study. The mean and the standard deviation of the participants' age and length of hospital stay were  $41.67 \pm 20.00$  years and  $10.80 \pm 5.60$  days, respectively. Most of the participants were women (56.2%). Moreover, 38.5% of the participants had high school education or lower, and 87% had insurance coverage which was mostly provided by the Social Welfare Organization (37.9%).

The study findings showed that 69% of the participants (264 people) were satisfied with the nursing care provided. Participants were mostly satisfied with items 'access to opportune nursing care' (81.7%). Also they were mostly dissatisfied with the item 'mastery and experience of practicing nurses' (12.6%) (Table 1). There was no significant correlation between patient satisfaction with nursing care and the participants age, gender, insurance coverage, length of hospital stay, and previous history of hospitalization; however, significant correlation was observed between patient satisfaction and participants' education level (P-value = 0.002).

On the other hand, we found that 67% of the participants (258 people) were satisfied with the medical care provided. The 'physician's manner' and 'easy access to physician as needed' items received the highest (82.7%) and the lowest (12.6%) scores, respectively (Table 1). The correlation between satisfaction with medical care and the participant's age, gender, insurance coverage, and length of hospital stay was not significant (P value = 0.05).

**Table 1.** Patient Satisfaction with Nursing Care and Medical Care

Valuables	Values			
	Dissatisfied	Fairly Satisfied	Completely Satisfied	Not Encountered
<b>Nursing Care</b>				
Nurses' manner	37 (9.7)	34 (8.9)	272 (71.2)	39 (10.2)
Mastery and experience of practicing nurses	48 (12.6)	29 (7.6)	267 (69.9)	38 (9.9)
Access to opportune nursing care	15 (3.9)	24 (6.3)	312 (81.7)	31 (8.1)
Availability and administration of medications	14 (3.7)	41 (10.7)	294 (77)	33 (8.6)
Patient education	32 (8.4)	47 (12.3)	258 (67.5)	45 (11.8)
Nurses' response to call alarm	39 (10.2)	60 (15.7)	229 (59.9)	53 (13.9)
Providing explanation before implementing each procedure	33 (8.6)	72 (18.8)	224 (58.6)	53 (13.9)
Protecting patients' privacy	30 (7.9)	53 (13.9)	252 (66)	45 (11.8)
<b>Medical care</b>				
Physicians' manner	21 (5.5)	25 (6.5)	316 (82.7)	20 (5.2)
Physicians' mastery and experience in diagnosing diseases	18 (4.7)	43 (11.3)	296 (77.5)	25 (6.5)
Easy access to physician as needed	48 (12.6)	54 (14.1)	230 (60.2)	50 (13.1)
Providing information regarding disease and treatments	46 (12)	56 (14.7)	229 (59.9)	51 (13.4)
Physicians' pre-discharge recommendations and educations	29 (7.6)	57 (14.9)	230 (60.2)	65 (17)
Listening to patients' questions and providing detailed instructions	33 (8.6)	40 (10.5)	248 (64.9)	61 (16)

## 5. Discussion

The study showed that patient satisfaction was at an average level. In one study, 79% of patients reported that doctors and nurses always communicated well with them (8). The findings of this study revealed that patient satisfaction was significantly correlated with participants' education level. Liu, Mok, and Wong, reported that the patients' education level influenced their expectations of care, as patients with high levels of education were reported to be dissatisfied with the quality of care provided (9). Patient satisfaction is a state in which patients not only feel they are receiving the necessary care and treatment, but they also feel satisfaction with the hospital environment and the quality of the care provided. A state of full satisfaction is when patients have a tendency to return to that organization at future referrals and they also recommend it to other patients.

The present study showed that 71% of the participants were satisfied with the nursing care provided. The participants' highest level of satisfaction was with 'access to opportune nursing care'. This finding is in line with the findings of the Jolae et al. They found that having easy access to nurses, as well as nurses' manner, were the most important factors contributing to patient satisfaction (10). Parvin et al. also found that 70.4% of patients hospitalized in teaching hospitals affiliated to a state university in Iran were satisfied with the nursing care provided. They found that patients' highest level of satisfaction was with rapid and on-time admission, opportune nursing care, and nurses' kind and sympathetic manner (11). The findings of the current study revealed that 71.2% of our participants had complete satisfaction with the nurses' manner. This might have been due to the continuing education programs implemented in Arak hospital settings that were aimed at improving the nurses' communication skills. Prior studies have highlighted the importance of collaborative care by physicians, nurses, and other members of the health care team (10, 12). Nurses are in a unique position to understand the needs and preferences of patients and families, to provide information to them, and to foster communication among patients, families, and other members of the caring team (13). Patient satisfaction is more dependent on the patients' expectations than on their real needs. This fact highlights the importance of communication.

We also found an indirect but significant correlation between satisfaction and participants' education. In other words, participants with higher education had lower levels of satisfaction with healthcare services and vice versa. Other studies have reported the same finding (14, 15). This might be due to the fact that individuals with higher levels of education are more aware of their rights and thus hold higher expectations. Although patients have differ-

ent needs and expectations, nursing and medical care remains a key determinant of overall patient satisfaction during a hospital admission. Both nurses and physicians need to know which factors influence patient satisfaction, if we are to improve the quality of healthcare.

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