International Journal of Engineering & Technology, 7 (3.7) (2018) 307-310



## **International Journal of Engineering & Technology**

Website: www.sciencepubco.com/index.php/IJET



Research paper

# Patient Satisfaction with Nursing Services in Public and Private Hospitals in Ahwaz, Iran

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#### **Abstract**

Introduction: Patient satisfaction is a complex phenomenon that influenced by various factors. Nursing services are one of the most important aspects affecting patient satisfaction. The aim of this study was to compare patient satisfaction with nursing services in public and private hospitals

Method: This is a cross-sectional study. The statistical population consisted of patients referring to public and private hospitals in Ahvaz in 2017. According to sample size formula, 560 patients were selected as a samples in public (N=350) and private (N=210) hospitals. To assess patient satisfaction, a valid questionnaire including 24 items in five dimensions including nursing behaviors, nursing care, patients' education, speed of nursing practice, and trust were used. Data were analyzed using SPSS.22 software and t-test, ANOVA, and Pearson correlation coefficient.

Results: the mean score of patient satisfaction with nursing care in public hospitals was (13.4, 95% CI 13.2 to 13.8) and more than private hospitals (11.6, 95% CI 11.1to 12.1). In public hospitals, patient education dimension was the highest score (3.1, 95% CI 2.9to 3.2). In private hospitals, nurses manner and behavior most scored (2.6, 95% 2.5to 2.7).

Conclusion: The present study showed that in public hospital patients' satisfaction with nursing services was moderate and in private hospital was poor..

Keywords: Patient satisfaction, Nursing services, Public hospital, Private hospital, Ahvaz

### 1. Introduction

Patient satisfaction is assessing the expectations and perceptions of a patient (client) from the experience that he or she obtains after using a product or service, the satisfaction result as the utility of consumption is introduced. In other words, the satisfaction of the patient's is patient's response (client) to his needs. Patient satisfaction is the overall attitude of the patient (client) towards the provider or an emotional reaction to the difference she/ he feels (1). Satisfaction is the feeling or attitude of a customer towards a product or service after use (2). Patient satisfaction is one of the most important indicators in measuring the quality of hospital services (3). Patient satisfaction of nursing care is defined as subjective, cognitive and emotional evaluation of the outcome of nursing interventions and understanding nursing behaviors. Patient Satisfaction is one of the most important goals of the curative team. Studies show that the patient's satisfaction with nursing services is consistent with effective communication with the curative team (5). There is a strong relationship between the satisfaction of hospital services and the satisfaction of nursing services. A most proportion of hospital performance is the function of nurses' system (6). Various factors affect the patient satisfaction from

hospital services, one of the most important of which is the quality of nursing services provided. Factors such as patient experience from other hospitals and level of education affect their satisfaction with nursing care (7). Patient education is effective on the patients' satisfaction from quality of nurses' services. Other factors, such as trust is a key factor in patients' satisfaction with the received services (8, 9).

## 2. Methods

#### Design and samples

This cross-sectional study was conducted in 2017. The study population consisted of all patients admitted to three teaching hospitals affiliated with Ahvaz University of Medical Sciences and three private hospitals. The sample size was calculated based on the results of other study (10, 11). Accordingly, with a type one error of 0.05 and a satisfaction mean of 50%, the sample size was determined to be 560. Then sampling was performed us¬ing a convenience method. Samples were selected from hospitals according to the number of beds proportionally. Finally, 350 patients were selected from public hospitals and 210 patients were selected from private hospital as sample.



#### Data collection and instruments

Data were gathered by a valid questionnaire (12). This tool consisted of two parts, including a 24-items patient's satisfaction questionnaire and demo-graphic characteristics including age, sex, and education level, type of medical insurance, hospitalization ward, and length of hospital stay, job, and place of residency. The patient satisfaction questionnaire consisted of five dimensions including nurse's manner, prompt reaction, patient's education, technical care, trust. Each item was answered on a 7-point Likert scale (1=strongly disagree, 7=strongly agree). Total satisfaction score was calculated from sum of response to all items. The possible score range for each dimension was 1-7. Therefore, total score of questionnaire including five dimensions was 5-35. A higher score indicates a greater satisfaction with nurse's services. Finally, patients' satisfaction was divided into poor (5-12), moderate (12.1-20) and good (20<). The reli-ability of the patient's satisfaction questionnaire was confirmed by checking its internal con-sistency. Accordingly, in the pilot study 30 patients were asked to complete the questionnaire. Cronbach's alpha was equal

#### Statistical analysis

Data were analyzed using descriptive statistics including mean, standard variation, and frequency and analytic statistic including ANOVA test, Person correlation coefficient, and independent-t test. The software package used to analyze the data was SPSS for Windows version 22 (SPSS Inc., Chicago, IL, USA) and the significance level was set at 0.05.

#### 3. Results

According to table1 and 2, the mean age of patients was 30.8±7.2 years and the majority of patients were belongs to the age group of 28-28 years. 62.5% of patients were female and 81.8% were urban. The majority of patients were covered by social security medical insurance. Mean of length of stay (LOS) 4.6±2.4 days. The results of study show age, gender, place of residence, medical insurance, and hospital stay had not a statistically significant relationship with satisfaction.

Table 1:. Demographic characteristics of patients (N=560)

Variables			%	Sig.*
	17-27	189	33.8	0.231
Age (yr)	28-38	245	43.8	
	38<	126	22.5	
Gender	Female	350	62.5	0.591
	Male	210	37.5	
place of resi-	Urban	458	81.8	0.21
dence	Rural	102	18.2	
	Internal	179	32	0.018
Hospital ward	Surgery	161	28.8	
	Genecology	129	23	
	Orthopedic	91	16.2	
	Social Security	191	34.1	0.875
Medical insur-	Medical Service	144	25.5	
ance found	Urban insurance	65	11.6	
	Armed forces	65	11.6	
	Other	76	17.1	0.001
Type of hospi-	Public	350	62.5	
tal	Private	210	37.5	

Table2:.Correlation between age and LOS with patients' satisfaction with nursing care

			1					
Variables	Mean± SD	Statistics	anner	the speed of nursing prac- tice	Patient's educa- tion	Technical care	Trust	Total satisfy
Age /Year	30.8±7.2	Pearson test	083*	0.04	-0.03	-0.02	-0.031	-0.028
		Sig. (2-tailed)	0.05	0.341	0.475	0.632	0.463	0.509
LOS*/Days	4.6±2.4	Pearson test	-0.011	-0.035	0.06	0.029	-0.009	0.013
		Sig. (2-tailed)	0.802	0.407	0.159	0.489	0.831	0.75

Table3 show the mean score of patient satisfaction with nursing care in public hospitals was (13.4, 95% CI 13.2 to13.8) and more than private hospitals (11.6, 95% CI 11.1to12.1). In public hospitals, patient education dimension was the highest score (3.1, 95% CI 2.9to3.2). In private hospitals, nurses manner and behavior most scored (2.6, 95% 2.5to2.7). All dimensions of patients' satisfaction with nursing care had significant differences in private and public hospital studied. According to diagram1, patients' satisfaction level with nursing care was weak in all hospitals as in public hospital 70% and in private hospital 84% of patients had poor satisfaction with nursing care.

#### 4. Discussion

Patient satisfaction with nursing care is an important factor in explaining patients' perceptions of service quality (13). Nursing care is most important hospital services that have the greatest impact on hospital activity (14, 15). Other researchers identified that providing nursing care is a major predictor of patient satisfaction (16, 17). A study examining surgical patient satisfaction as an outcome of nurse caring in six European countries showed that caring behaviors by nurses determined patients' satisfaction significantly. The authors reported that 44.1% of satisfaction variance was explained by the nurse caring behaviors as perceived by the patients (18). Nursing staff should understand patient characteristics and their expectations when providing care (19).

Table3:. Comparison of patient satisfaction with nursing services in public and private hospitals

Type of hos	spital	Nurse's	The speed of	Patient's edu-	Technical	Trust	Total	Level of satisfac-
		manner	nursing practice	cation	care		satisfy	tion***
Public	Mean±	$2.9\pm0.6$	2.3±0.8	3.1±1.1	2.6±0.9	2.4±0.8	13.4±3.6	Moderate
(N=350)	SD							
	95% CI	[2.8-2.9]	[2.2-2.4]	[2.9-3.2]	[2.5-2.7]	[2.3-	[13.2-	
						2.4]	13.8]	
Private	Mean±	2.6±0.8	2.1±0.9	2.4±1.1	2.3±0.8	2.1±0.7	11.6±3.6	Poor
(N=210)	SD							

95% CI	[2.5-2.7]	[1.8-2.1]	[2.3-2.6]	[2.5-2.7]	[2.02-	[11.1-	
P.value**	0.001	0.001	0.001	0.001	2.2]	12.1]	
					0.001	0.001	

<sup>\*</sup>CI: Confidence Interval for Mean;

<sup>\*\*\*</sup>Patients' satisfaction was divided into poor (5-12), moderate (12.1-20) and good (20<).

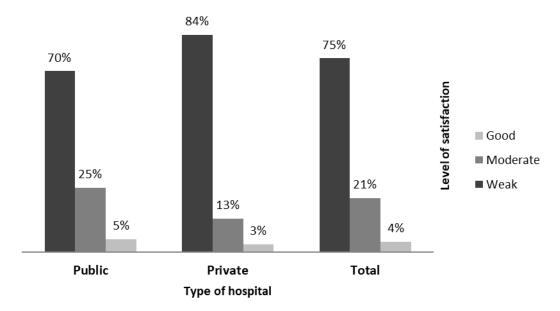


Diagram1:. Patient satisfaction with nursing care

The study showed that mean patient satisfaction with nursing care in public hospitals 13.4 (95% CI 13.2 to 13.8) was more than private 11.6 (95% CI 11.1to 12.1). In private hospitals, patients' satisfaction level with nursing care was poor and in public hospital was moderate. A study examined inpatient satisfaction with nursing care in a teaching hospital in China. Results showed that the patients had a relatively high level of satisfaction with nursing care (20). Farahani et al. showed that patient satisfaction was at an average level in hospital affiliated to Arak University of medical sciences (21). Khezri et al reported patient satisfaction was poor in nursing care of hospital in Boshehr (22). The results of study of Joolaee et al. in Tehran showed that level of patients' satisfaction with nursing care was moderate (23). A similar study recommends many of the identified areas for quality improvement are related to nursing care (24). In public hospitals, Patient education was the highest score in comparison with other aspects of patient satisfaction 3.1 (95% CI 2.9 to 3.2). In private hospitals, nurses manner had a highest score 2.6 (95% 2.5 to 2.7). In both public and private hospitals prompt action scored less. Zarei et al. showed that training before discharge to patients and speed of care had the lowest score between patients' satisfaction aspects (25). Nemati et al. reported that patient's education and nursing skill and experiences were poor from patients' perspective (26). In a study Gorari et al concluded that patient education contributes to patients' satisfaction with nursing services, so their research is consistent with the current research (8). Joolaee et al. (23) and Mosavi et al. (27) reported that nurse's manner and behavior is a key factor affecting patients' satisfaction. In a study, Gholjeh et al. showed satisfaction with nursing care was moderate. Also, there was a significant relationship between the speed of nursing practice and patient satisfaction (28). Also, the present study showed that trust in nurses was low in both private and public hospitals. Jannati et al. explained that patient's satisfaction in term of trust was higher than other dimensions (29). The patient should be able to accept the nurse emotionally and logically. Nurse plays a key role in this acceptance. Emotional acceptance by the patients leads to trust. The trust helps the patients to adjust the expectations and increase the nurse's satisfaction (3).

Patient satisfaction is affected by various factors. Demographic factors including age, gender, race, location, level of education, job and institutional factors including hospital ward, the number of hospital beds, and type of hospital can affect patient satisfaction in hospital. The results of our study showed age, sex, place of residence, medical insurance, and hospital stay had not a statistically significant relationship with satisfaction. Liu et al. explained Patients' age, educational background, occupation, methods of payment, and hospital wards were main factors influencing their satisfaction with nursing care (20). Khezri et al reported that age, sex, job, and medical insurance had not significant relationship with patients' satisfaction (22). Joolaee et al reported that from demographic factors, level of education had only significant relationship with patients' satisfaction (23). However, according to various studies, individual factors can affect patient satisfaction with hospital services. The impact of these factors, along with other organizational, cultural and social factors, requires more attention.

## 5. Conclusions

The present study showed that satisfaction of patients from public hospitals was higher than private hospitals. In private hospitals, ppatients' satisfaction level with nursing care was poor and in public hospital was moderate. In public hospitals, Patient education and in private hospitals nurses manner most scored. Nursing care plays a key role in patient satisfaction and hospital performance. Hospital managers should assess factors affecting patients' satisfaction and address these factors using managerial intervention according to the mission and goals of the hospital.

#### Acknowledgment

This paper is the part of Master's thesis in health services management that was prepared by Mr. Hossein Pourmoosavi. We would like to express our gratitude and thanks to the efforts of all the managers and nurses of the private and public hospitals for contributing to this research.

<sup>\*\*</sup>Significant level was <0.05;

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