



Correlation Between Nurses' Caring Behaviors and Patients' Satisfaction

Ismail Azizi-Fini ¹, Masoumeh-Sadat Mousavi ², Atefeh Mazroui-Sabdani ², Mohsen Adib-Hajbaghery ^{1*}

¹Trauma Nursing Research Center, Kashan University of Medical Sciences, Kashan, IR Iran

²Department of Medical-Surgical Nursing, Kashan University of Medical Sciences, Kashan, IR Iran

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ABSTRACT

Background: Nowadays, the patients' satisfaction is used as a criterion to measure the hospitals' service quality. However, there are controversial results about the aspect of caring behaviors which mostly affects the patients' satisfaction.

Objectives: The current study aimed to assess the relationship between caring behaviors and patients' satisfaction.

Patients and Methods: A descriptive correlation study was conducted on 250 randomly selected patients in Beheshti Hospital in Kashan, Iran. A questionnaire was used to gather the data. Degree of satisfaction was measured on a five-point scale using the patient satisfaction instrument, and caring behavior was measured on a six-point scale by caring behavior inventory.

Results: A significant positive correlation was observed between caring behavior mean score and that of the patient satisfaction ($P < 0.001$, $r = 0.565$). The subscale of "knowledge and professional skills" of the caring behavior inventory obtained the highest and the subscale of "respectful deference to others" got the lowest mean scores. In the patient satisfaction instrument, the two subscales of "technical - professional care" and "patient education" gained the highest and the lowest mean scores respectively.

Conclusions: The caring behaviors of nurses and patient education can increase the patient satisfaction.

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► Implication for health policy/practice/research/medical education:

Patient satisfaction is relevant to the nurses caring behaviors. Nurses and the hospital authorities are responsible for creating a caring environment and improving the nurses' caring behavior to improve the patients' satisfaction.

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1. Background

Caring is the essence of nursing and is the basic factor that distinguishes between nurses and other health professions (1, 2). The concept of caring in nursing studies has been defined in different ways. Watson argues, "Caring includes knowledge, performance and the results" (3). Morse *et al.* represented definitions of caring according to the five major conceptualizations of caring: caring

as a human trait; caring as a moral imperative; caring as an affect; caring as an interpersonal interaction; and caring as an intervention (4). Caring is an interpersonal process that is characterized by expert nursing, interpersonal sensitivity and intimate relationships (5). It is the most important and critical factor in enhancing the human life (6) and is considered as the key role in the nursing team (7, 8). Caring includes behaviors such as respect for the others, assurance of humanistic presence, posi-

* Corresponding author: Mohsen Adib-Hajbaghery, Trauma Nursing Research Center, Kashan University of Medical Sciences, Kashan, IR Iran. Tel: +98-3615550021, Fax: +98-3615556633, E-mail: adibhajbagheri_m@kaums.ac.ir

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tive communication, professional knowledge and skills and attention to the experiences of the others (9). In the meantime, the patients' satisfaction from caring behaviors is very important in the field of health care (10). An insecure condition occurs for most of the patients who are hospitalized, which is followed by some tensions for them. These tensions may affect the patients' satisfaction and the treatment outcomes. The staff is not only a source for patient information but also they are the most important source of support and comfort (11). These caring behaviors can improve the quality of care and thus, cause a sense of security, reduction of anxiety, and the consensus between caregiver and care recipient (12, 13), which subsequently may enhance the patient satisfaction (11). In investigating the relationship between patient satisfaction and nursing care, Davies and Mahon found that the patients' satisfaction is closely linked with the quality of nursing care and the nurses' caring behaviors (14, 15). Today, the patients satisfaction is used as a criterion to measure the hospitals' service quality (16). Researchers have shown that the satisfied patients had better compliance with the treatment plans (17). Thus, the satisfaction with care can be an important factor in promoting health and well-being of patients. Studies have shown that the care givers' good communication and positive mutual interactions with the patients are the most important measures for patient satisfaction in the emergency and general wards (18, 19). Some researchers indicated that factors such as age, gender, race, socio-cultural situation and severity of the disease can affect the patients' satisfaction (20). Some of the studies have also shown a correlation between patients' perceptions of the nurses' caring behaviors and satisfaction from nursing care (9, 21). Patients' satisfaction with caring behaviors is achieved when there is congruence between the patients' expectations and care they receive (18). However, some of the studies have shown that the patients tend to have higher satisfaction with technical aspects of their care than other aspects of caring such as interpersonal relationships (22). Zahr *et al.* have also indicated that, the technical aspects of caring were associated with the highest satisfaction, while the lowest levels of satisfaction were related to the psychological aspects of care (23). Unfortunately, few studies have been conducted in this regard. Due to the existing conflicts in this area and the fact that the medical and surgical wards of the hospitals were dedicated to the greatest number of patients, the need to consider the above factors in this area has high priority.

2. Objectives

The present study aimed to investigate the patients' expectations and its relationship with the satisfaction of nursing care in the medical and surgical wards of Shahid Beheshti Hospital of Kashan, Iran.

3. Patients and Methods

A descriptive correlation study was conducted on a randomly selected sample of 250 patients admitted to the medical and surgical wards of Beheshti Hospital in Kashan, Iran. The researcher obtained the needed permissions from the authorities in the Kashan University of Medical Sciences, and the Research Ethics Committee of the university and the hospital authorities approved the study. After a pilot study on 25 patients, sample size was estimated to be 275 patients based on the following formula ($\alpha = 0.95$, $1-\beta = 0.8$, $r = 0.27$, $C = 0.27$). Patients who had the inclusion criteria were selected by daily referring to the wards. Sampling continued until the estimated sample size was completed. A minimum age of 16 years, being Iranian, dominance over the Persian language, being hospitalized at least for one day, not having hearing and visual problems were considered as inclusion criteria. Unwillingness to participate and severe changes in mental and physical conditions during the data collection were considered as exclusion criteria. In the beginning, the researcher presented the necessary explanations about the research objectives to the patients. When the subjects signed the informed consents form, they were asked to complete the questioners. The items of the questionnaire were read by the researcher to the illiterate people and their answers were identically marked on the questionnaire. Data collection tool consisted of three parts. The first part of the questionnaire included the demographic characteristics such as age, gender, marital status, education level, type of illness, type of ward, economic status, occupation, and duration of hospitalization, frequency of hospitalization, previous experience of hospitalization, surgery and waiting for the surgery. The second part of the questionnaire included the Caring Behavior Inventory (CBI) to measure the nurses' caring behaviors. This instrument was developed by Wolf *et al.* (19). It had 42 items in five areas including "respect for others", "assurance of human presence", "communication and positive trend", "professional knowledge and skills" and "attention to the experience of others". Each item ranked on a Likert scale from never = 1 to always = 6 with the minimum and maximum score of 42 and 252, respectively. The third section of the questionnaire included the Patient Satisfaction Instrument (PSI) which measured patient satisfaction of the care received (19). The PSI had 25 items in three areas: "technical-professional care", "trust" and "patient education". It was scored on a Likert scale from strongly disagree = 1 to strongly agree = 5. The minimum and maximum points gained were 25 and 125, respectively. The content validity of the instruments was verified by 8 faculty members of Kashan University of medical sciences. Reliability was also assessed by calculating the Cronbach's alpha (CBI = 0.92 and PSI = 0.90) (21). SPSS 11.5 was employed to analyze the data. Descrip-

tive statistics were calculated and the Pearson correlation coefficient was used to determine the relationships between variables.

4. Results

Out of 275 samples, 25 questionnaires were discarded due to incomplete responses and 250 ones were analyzed. Of the 250 reminded samples, 51.6% were male and 80% were married. Also 42% of the patients were illiterate, 37.2% had elementary education and 20.8% had secondary and higher education (Table 1). The mean age of the subjects was 47.2 (SD = 15.13) years and mostly (68.4%) were

lover than 55 years old. The length of stay for 56.8% of the patients was less than one week, for 30.4% was 1 - 2 weeks and for 12.8% was longer than two weeks. Also, 76.4% and 23.6% of the patients were hospitalized in medical and surgical wards, respectively. The mean score for "nurses' caring behavior" was 184.57 (SD = 44.48) and for "satisfaction with nursing care" was 68.23 (SD = 12.51). The results showed that among the subscales of caring behaviors, the subscale of "professional knowledge and skills" had the highest score and the subscale of "respectful deference to others" got the lowest score. Of the PSI, the subscale of "technical -professional care" had the highest

Table 1. Demographic Specifications with Caring Behaviors and Patient Satisfaction

	Caring Behavior, Mean \pm SD	Patient Satisfaction, Mean \pm SD
Length of stay, wk		
<1	4.42 \pm 1.03	2.7 \pm 0.45
>1	4.33 \pm 1.20	2.74 \pm 0.51
Part		
Medical	4.47 \pm 0.92	3.27 \pm 0.64
Surgical	4.37 \pm 1.09	3.27 \pm 0.44
Age, y		
55 >	4.31 \pm 1.7	3.28 \pm 0.52
56 <	4.57 \pm 1.02	3.25 \pm 0.45
Gender		
Male	4.37 \pm 1.07	3.33 \pm 0.55
Female	4.41 \pm 0.44	3.2 \pm 0.43
Education		
Illiterate	4.47 \pm 1.05	3.25 \pm 0.42
Literate	4.23 \pm 1.10	3.28 \pm 0.52

Table 2. Caring Behavior and Patient Satisfaction ^a

	Mean \pm SD
Caring Behaviors Inventory (CBI)	
Respectful deference to others	4.28 \pm 1.09
Assurance of the human presence	4.31 \pm 1.18
Positive connectedness	4.38 \pm 1.16
Professional knowledge and skills	4.80 \pm 1.07
Attentiveness to others experiences	4.47 \pm 1.27
Total	4.39 \pm 1.05
Patient Satisfaction Instrument (PSI)	
Trust	3.15 \pm 0.43
Patient education	3.14 \pm 0.65
Technical - professional care	3.59 \pm 0.67
Total	3.27 \pm 0.50

^a $r = 0.57$ and $P < 0.001$ for total CBI and PSI scores

Table 3. Caring Behaviors (Cb) and Patient Satisfaction (Ps) in Different Wards

	Mean ± SD	P value
Caring behaviors		0.52
Medical	4.37 ± 1.09	
Surgical	4.47 ± 0.92	
Patient satisfaction		0.92
Medical	3.27 ± 0.44	
Surgical	3.27 ± 0.64	

score while the subscale of “patient education” got the lowest score (Table 2). Also no significant differences were observed between the mean scores for caring behaviors or patient satisfaction in different wards (Table 3). A significant direct correlation was observed between the scores of “nurses’ caring behaviors” and “patient satisfaction” ($P < 0.001$, $r = 0.57$). All of the subscales in CBI and the subscales in PSI were significantly correlated (Table 4).

Table 4. The Correlation Between Subscales of Caring Behaviors and Patient Satisfaction Patient Satisfaction Subscales^a

	Patient Satisfaction		
	Trust	Patient Education	Technical-Professional Care
Caring behaviors			
Respectful deference to others	$r = 0.516$	$r = 0.492$	$r = 0.517$
Assurance of the human presence	$r = 0.451$	$r = 0.411$	$r = 0.483$
Positive connectedness	$r = 0.506$	$r = 0.476$	$r = 0.496$
Professional knowledge and skills	$r = 0.407$	$r = 0.369$	$r = 0.506$
Attentiveness to others experiences	$r = 0.310$	$r = 0.341$	$r = 0.348$

^aAll the pearson correlation coefficients were significant at the level of 0.001

5. Discussion

The current study demonstrated that there was a significant direct relationship between the nurses caring behaviors and the patients’ satisfaction. This finding is consistent with the previous studies (9, 19, 21). Nurses’ communication with the patients is the most important behavior in caring the hospitalized patients. This direct and significant relationship between the caring practices and the patients’ satisfaction show that the positive nurses’ behaviors could improve the patients’ attitude to health care and their satisfaction (23). Therefore, nurses should try to combine their knowledge and skills in various fields in order to increase the quality of care and the patient satisfaction by providing a caring and professional behavior. This may help the patients to recover faster (21). In the present study, no significant differences were observed between the mean scores for caring behaviors or patients’ satisfaction in different wards. Also, the highest mean scores for CBI in the present study were related to the subscale of “professional knowledge and skills”, which was consistent with the findings of other studies (9, 21). Perhaps it was due to the high importance of this area from the perspective of the nurses. It may also be influenced by the more sensible nature of care practice in this area. Also, the lowest mean score in caring behaviors was related to the area of “respectful deference to others”. This finding indicated that such behaviors were observed less than the behaviors in other subscales. This finding was consistent with the study of Rafii et al. (21) and inconsistent with the findings of Wolf et al. (9). It has been shown that behaviors such as active listening, sin-

cerity, helping the patients to make an appropriate decision, and respectful communication with patients, can induce the patients a sense of being respected (9). Therefore, nurses are recommended to pay more attention to this important area. Previous studies have also shown that improvement in nurse-patient communication had a positive effect on patients’ feeling of being respected (24). Some of the previous works have also reported that due to a shortage of nursing staff, large numbers of patients and heavy workloads, Iranian nurses spend most of their time and energy to do the doctors’ orders, writing the reports and doing some secretarial jobs. Such a condition, would cause nurses fatigue, and nervousness and would prevent professional caring relationships with patients and their relatives. Then, the patients’ respect and emotional needs may be neglected (21). The patients under study were mostly satisfied in the area of “technical-professional care”. This finding was consistent with the Rafii et al. (21) and Wolf et al. (9), who reported that most of their patients were satisfied with the area of “technical-professional care”. The patients under study also had the lowest satisfaction with the subscale of “patient education”. These findings were consistent with the findings of Rafii et al. and Wolf et al. (9, 21). Previous studies have also shown that the patient satisfaction would increase by providing information (24, 25). Due to the shortage of nurses in the hospitals and forcing them to perform medical procedures and technical routine care, perhaps they have no or little time for patient education. The hospital authorities are recommended to recruit more nurses, then, the nurses would be able to have more direct care. Consequently, the amount and the

quality of nurse-patients communication and opportunities for patient education would increase. Finally, the nurses' caring behavior and the patients' satisfaction will improve. The significant correlation between all of the subscales in CBI and the subscales in PSI shows that patient satisfaction is influenced by all caring behaviors as a whole. Then, nurses are recommended to improve their own behaviors in all aspects of the caring behaviors. This study demonstrated that the patient satisfaction was relevant to the nurses caring behaviors. Therefore, creating a caring environment and improving the nurses' caring behaviors may improve the patient quality of care and that will finally improve the patients' satisfaction. Implementing some in-service training programs about caring behavior and its different areas along with increasing the number of nurses in charge may positively affect the nurses caring behaviors.

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Authors' Contribution

Ismail Azizi-Fini was responsible for the study conception and design, and prepared the first draft of manuscript. Mohsen Adib-Hajbaghey performed the data analysis, made critical revisions to the paper and translated the manuscript. Masoumeh-Sadat Mousavi and Atefeh Mazroui Sabdani performed the data collection. Azizi-Fini and Adib-Hajbaghey supervised the study.

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The authors declare that they have no competing interests.

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