Investigation of Patient Satisfaction with Nursing Care at Hospital

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Abstract: *Introduction: Patients undergoing kidney transplant surgery require special nursing care. Due to lack of research on kidney transplant patients' level of satisfaction with nursing care, the present study was conducted to evaluate the relationship between nurses' caring behavior and kidney transplant patients' satisfaction with nursing care in selected hospitals of Shahid Beheshti University of Medical Sciences in 2016. Methodology: This research was a descriptive-correlational study. The research sample included 194 kidney transplant patients admitted to teaching and therapeutic centers of Shahid Beheshti University of Medical Sciences. The tools used in this research included the Wolf Caring Behavior Inventory and Nancy Risser Patient Satisfaction Questionnaire. Data were analyzed using STATA13 software. Results: The results of the research did not find a relationship between the satisfaction score of patients and the mean score of nurses' caring behavior (p = 0.894). However, a direct relationship was found between the score of nurses' caring behavior and patient training dimension in the patient satisfaction tool (p = 0.001). Additionally, a direct and significant relationship was found between patient satisfaction and the dimension of assurance of human presence (p = 0.001). Conclusion: The results of this research emphasize the importance of patient training in satisfying patients. In addition, in order to gain the trust of the patients, attention should also be paid to the human presence of nurses and the positive attitude and communication and respect for patients.*

Keywords: *Nurses' caring behavior, Patient satisfaction, Nursing care, Kidney transplant patients*

INTRODUCTION

Care has biological, physical, psychological, cultural, social and environmental dimensions that should be investigated to meet the comprehensive caring needs of the patient (Karaöz, 2005). Care elements include emotional support, providing peace of mind and comfort, and establishing proper communication (Bolderston, Lewis and Chai, 2010). Care should be patient-centered and provided based on the interests and the specific cultural, social and physiological characteristics of each patient. As technical cares and client cares complement each other, nursing care not only involves prescribing drug, taking blood samples, and performing other cares and specialized tests, but also listening to the patient and his feelings and recognizing his wishes (Rahemi, 2006). It is believed that care takes place when nurses recognize the wishes and views of the patients and consider themselves in the patient's position. Therefore, with gaining more knowledge of

patient perception of prioritizing care behaviors, nurses can provide adequate support and comprehensive nursing care based on the individual needs of patients (Pashaee et al., 2014). Caring behaviors increase the feeling of safety in patients and reduce anxiety, and establish a good relationship between the caregiver and the patient (Liu et al., 2010). Patient satisfaction affects the process and outcome of treatment and following the orders, and finally improves the condition and control of the disease (Shakerinia, 2009). It also increases the patient's involvement in care and it can accelerate the process of recovery and reduce the length of hospitalization, leading to the reduced economic burden for both the patient and the community (Bahrami et al., 2015).

Providing care for chronic renal patients is a complex process that requires examination, planning, intervention, and training the patient continuously for several weeks and even decades (Neyhart et al., 2010). Kidney transplant is a proposed treatment for end-stage kidney disease (Abecassis et al., 2008). The donating and receiving all transplants for patients is an experience of change in life. Patients and their families, regardless of their socioeconomic status, need guidance, kindness and support by nurses before, during and after transplant (Gordon et al., 2010). The importance of patient satisfaction with nursing care received during patient hospitalization is so critical that it can influence the patient satisfaction with all services provided by the hospital (Yılmaz, 2001). The behavior and attitude of health staff are very effective in patient satisfaction. Treating with patient with respect and giving the correct information for him or her is characteristics of a desirable service (Özlü and Uzun, 2015). The caring behavior in transplant patients and their satisfaction is crucial, so that Brown and Finnell in 2015 provided nine ethical codes for the care of transplant patients before, during and after transplant based on the ANA Code of Ethics for Nurses (Brown and Finnell, 2015). Care as the main component of nursing patients' satisfaction, is a very important indicator in evaluating the quality and provision of services by the nursing staff and it is considered as desirable achievements of the development of health care and medical services in the community. Moreover, satisfaction is completely an abstract concept and new dimensions of this concept are identified by more studies. Nursing care plays an important role in kidney transplant patients and the satisfaction of these patients. No research was found in this regard in Iran. Hence, given what was stated above, this study was conducted to evaluate the relationship between nursing care behavior and kidney transplant patients' satisfaction with nursing care in selected hospitals of Shahid Beheshti Medical Sciences University in 2016.

Methodology

This research is a descriptive-correlational study conducted to evaluate the correlation between nursing care behaviors and kidney transplant patients' satisfaction in selected hospitals affiliated to Shahid Beheshti University of Medical Sciences. The research population included all kidney transplant patients admitted to selected hospitals affiliated to Shahid Beheshti University of Medical Sciences. The research environment also included all kidney transplant wards of Shahid Modarres and Shahid Labafi-Nejad hospitals affiliated to Shahid Beheshti University of Medical Sciences. The convenient sampling method was used in the present study and it included all patients who met the inclusion criteria. Considering the alpha of 0.05, the power of 80% and the correlation coefficient of 20% (according to the expert's opinion), the sample size was estimated to be 194 people. The research inclusion criteria included a lack of hearing, visual, speaking, and known psychiatric disorders, passing of at least five days of kidney transplant in recently transplanted patients and age above 18 years. It should be noted that the sampling was performed for 4 months from March 2016 to June 2017.

Given the research objectives, the data collection tool in this study included three sections. The first section included demographic characteristics, including age, gender, marital status, education level, economic status, job, length of hospitalization, time waited for transplant surgery and length of transplant surgery. The second section of the tool included the Caring Behavior Inventory, designed by Wolf for the first time in 1981 with 75

items by investigating the behaviors and performance of the nurses through the review of the studies. It was also revised to 42-item and 24-item versions (Wu, Larrabee and Putman, 2006). This inventory has 24 items and five dimensions including respect for others, assurance of human presence, positive tendency and communication, professional knowledge and skills, and paying attention to the experience of others. Each item is based on the 6-point Likert scale, ranked from never = 1 to always = 6. To measure the mean of each sub-scale, the scores of items were summed up and the total score was divided by the number of items. The minimum score was 24 and the maximum score was 144. In the mentioned tool, higher scores represent proper caring behaviors. The third tool included the Patient Satisfaction Tool, designed for the first time by Nancy Risser in 1975 with the aim of evaluating the attitudes of patients to nurses and nursing care in outpatient wards. This tool includes 25 items and three dimensions of technical equipment – professional care (7 items), trust (11 items) and training patient (7 items). Each item is scored on a 5-point Likert scale ranging from strongly agree =5 to strongly disagree=1.

This tool has negative and positive items and negative item scores will be calculated inversely. In addition, to measure the mean of each dimension, the scores of the items of each dimension are summed up and the total score of the items will be divided by the number of items. The minimum score is 25 and the maximum score is 125. To calculate the mean patient satisfaction scale, the scores of all items were summed up and divided by 25. Although the content validity of the caring behaviors inventory was confirmed in Iran by Haji Nejad et al in the study entitled "Comparison of patient and nurses' viewpoints on caring behaviors in nursing staff" (Hajinezhad et al., 2012), its content validity was determined to evaluate its consistency with the research objectives. Accordingly, using the views of the supervisors and advisors, the tool was translated and distributed to 10 faculty members of the Faculty of Nursing and Midwifery of Shahid Beheshti University of Medical Sciences. After collecting the views and applying the necessary changes based on the views of the instructors, the tool was re-examined by two experts and its content was confirmed. With regard to patient satisfaction tool, this tool was translated into Persian by Haji Nejad in Iran in 2007 and used in several studies (Peyrowi et al., 2013; Gholjeh, Dastoorpour and Ghasemi, 2015). However, its content validity was determined in this study to evaluate its consistency with the research objectives. Accordingly, using the views of the supervisors and advisors, the tool was translated and distributed to 10 faculty members of the Faculty of Nursing and Midwifery of Shahid Beheshti University of Medical Sciences. After collecting the views and applying the necessary changes based on the views of the instructors, the tool was re-examined by two experts and its content was confirmed.

To determine the reliability of the caring behavior inventory, the questionnaire was provided to 20 patients. The Cronbach's alpha coefficient was obtained 0.91 for respect for others, 0.92 for assurance of the human presence, 0.82 for positive tendency and communication, 0.83 for professional skills and knowledge, and 0.92 for paying attention to others' experiences. Cronbach's alpha for the whole tool was calculated $\alpha = 0.84$, indicating desirable reliability of the tool. Additionally, to determine the reliability of the patient satisfaction tool, it was provided for 20 patients and its Cronbach's alpha coefficient was obtained 0.786 for technical-professional care dimension, 0.876 for dimension of trust, 0.784 for training the patient dimension, and the Cronbach's alpha for the whole tool was calculated $\alpha = 0.9$, indicating desirable reliability of this tool. After collecting questionnaires, frequency tables and charts were used to describe the qualitative data and indices such as mean and standard deviation were used to describe the quantitative data. To examine the correlation between scores of two questionnaires, the Pearson correlation or Spearman correlation (depending on normal or non-normal distribution of two variables) with a significant level of 0.05 was used. To examine the relationship between demographic variables and nurses' caring behaviors and the patients' satisfaction, the linear regression model was used and data were analyzed by using STATA13 software. It should be noted that this study was approved by the honorable officials of the Autonomous College and Graduation School of Shahid Beheshti University of Medical Sciences under the ethics code of IR.SBMU.PHNM.1394.257.

Results

In line with the general objective of the study, 190 patients of Shahid Modarres and Labafi Nejad hospitals affiliated to Shahid Beheshti University of Medical Sciences were studied in 2016. The demographic characteristics of the subjects showed that their mean age was 38.38 years (SD: 11.87 years). In terms of gender distribution, 42.63% (81 subjects) were female and 57.77% (109 subjects) were male. In terms of marital status, 63 (32.80%) were single, 42.33% (80 subjects) were married and 21.16% (47 subjects) were divorced or widowed. In terms of the level of education, 55 of them (29.10%) had under diploma level of education, 76 (40.21%) had diploma, 46 (24.34%) had bachelor, and 13 (6.37%) had a master level of education. In terms of job status, 66 (35.29%) were self-employed, 35 (18.72%) were employees, 44 (23.53%) were housewives and 29 (15.51%) were unemployed or unable to work. Moreover, 182 (98.91%) reported the history of the previous hospitalization. The results obtained from the mean and standard deviation of total scores and dimensions of the nursing care behavior in the kidney transplant ward from the patients' viewpoint showed that the highest score belonged to professional skills and knowledge with a score of 5.84 and the lowest score belonged to positive tendency and communication with a score of 5.33 (Table 1).

Table 1- mean and standard deviation of total scores and dimensions of nurses' caring behavior in kidney transplant ward from patients' viewpoint in teaching hospitals of Shahid Beheshti University of Medical Sciences in 2016

variable	n questions	min	max	mean	SD
Respect for others	5	3.4	6	5.60	0.40
assurance of human presence	8	1.37	6	5.57	0.43
Positive tendency and communication	6	3.5	6	5.33	0.35
Professional skills and knowledge	5	4.4	6	5.84	0.24
Total	24	4.08	6	5.57	0.29

The results obtained from the mean and standard deviation of total scores and dimensions of the kidney transplant patients' satisfaction with nursing care tool also showed that the highest score belonged to professional-technical care with a score of 4.44 and the lowest score belonged to trust with a score of 3.61 (Table 2).

Table 2- mean and standard deviation of total scores and dimensions of the kidney transplant patients' satisfaction with nursing care tool in teaching hospitals of Shahid Beheshti University of Medical Sciences in 2016

variable	Number of questions	min	max	mean	SD
Technical-professional care	7	2.71	5	4.44	0.47
trust	11	2.25	4.5	3.61	0.37
Training patient	7	2.5	4.33	3.99	0.33
total	25	4.6	2.64	3.93	0.27

The analysis of the results showed that there was a direct and significant correlation ($p = 0.001$) between the scores of nurses' caring behavior and patient training dimension in patient satisfaction tool. There is a direct and significant correlation between patient satisfaction and assurance of human presence ($p = 0.001$) (Table 3).

Table 3- Spearman correlation between nursing care behavior and kidney transplant patients' satisfaction with nursing care in selected teaching hospitals of Shahid Beheshti University of Medical Sciences in 2016

Variables		Patients' satisfaction	Technical-professional care dimension	Trust dimension	Training patient dimension
Mean score of nurses' caring behavior	Correlation of coefficient (R)	0.009	0.023	0.117	0.390
	Significance level (p-value)	0.894	0.742	0.104	0.001
Respect for others dimension	R	0.075	0.101	0.284	0.591
	p-value	0.295	0.161	0.001	0.001
Assurance of human presence dimension	R	0.231	0.227	0.356	0.294
	p-value	0.001	0.754	0.001	0.001
Positive tendency and commination dimension	R	0.009	0.050	0.211	0.270
	p-value	0.894	0.487	0.003	0.001
Professional skills and knowledge skill	R	0.045	0.329	0.458	0.359
	p-value	0.527	0.001	0.001	0.001

Moreover, the results showed that the mean of caring behaviors and patient satisfaction with caring behaviors based on education level, gender, marital status, job status, ethnicity and history of hospitalization were not significantly different (p> 0.05).

Discussion

The results of this study showed that the mean scores obtained from nursing care behaviors are different in different four areas, so that the highest score belonged to professional skills and knowledge dimension. Based on the results of this study, the highest caring behavior observed in nurses is professional skills and knowledge. These results are consistent with the results of the research conducted by Haji Nejad et al. (2012) and Rafiei et al. (2008). The results of the review study conducted by Papastavrou et al to evaluate the nurses and patients' perceptions of nurses' caring behaviors showed that patients considered technical caring skills of nurses more important than other caring behaviors and showed that the competence of doing the nursing activities is more important to them (Papastavrou, Efstathiou and Charalambous, 2011). The results of this study also showed that the lowest score among dimensions of nurses' caring behavior belonged to positive tendency and communication dimension. Studies have shown that lack of time and fatigue lead to the negative attitudes and emotional stress in nursing staff, and these cases are manifested as emotional and physical withdrawal from the patient. In many cases, it makes staff ignore the emotional needs of the patients (Rafii, Hajinezhad and Haghani, 2008; Zank, 2016), while the relationship between nurse and patient is the basis for achieving superiority in nursing care (Bassett, 2002).

The results of this study showed that the mean scores obtained from the satisfaction of patients in different areas of the questionnaires were different, so that the technical-professional care dimension had the highest score. This result is consistent with the results of the research conducted by Wolf et al. (2003). It can be due to the high importance of this group of caring behaviors from the patients' viewpoint. The trust also showed the lowest score, which is completely inconsistent with the result of the research conducted by Julia et al, in which trust obtained the highest score (Joolaee et al., 2011). Moreover, the results of this study showed no relationship between mean scores of patients' satisfaction and nurses' caring behavior. However, a direct and significant correlation was found between mean scores of nurses' caring behavior and training patient dimension in the patient's satisfaction tool. In addition, the correlation between patient satisfaction and assurance of human presence dimension was a direct and significant correlation. In the study conducted by Haji Nejad et al, a significant relationship was found between caring behaviors and patient satisfaction with care dimensions and between the total scale of caring behaviors and patient satisfaction with care (Hajinezhad et al., 2007).

The presence of a direct and significant relationship between the nurses' caring behavior score and training patient dimension indicates the need and paying attention to this dimension of kidney transplant patients. The outcome of training is maintaining and development of health in the community. It will also have many benefits, such as reducing the length of diseases, accelerating the acquisition of independence by the client and maintaining self-esteem in self-care (Marcum et al., 2002). Orrmann and Templin also reported that patients need health-related training by the healthcare team and patients always expect healthcare team members to respond to their question with full knowledge (Oermann and Templin, 2000).

Conclusion

The results of this study showed no correlation between mean scores of patients' satisfaction and nursing care behavior, but a direct and significant correlation was found between nurses' caring behavior score and training patient dimension in patient satisfaction tool. In addition, there was a direct and significant correlation between patient satisfaction and assurance of human presence dimension. The significant relationship between two dimensions of assurance of human presence and training patient is one of the most important results of this study, which emphasizes the importance of changing the nursing approach from task-oriented towards comprehensive approach and having a holistic view to human. In addition, no significant difference was found between the gender, level of education, marital status, job status, history of hospitalization and ethnicity of the research subjects in hospitals affiliated to Shaheed Beheshti University of Medical Sciences and understanding of caring behaviors and satisfaction of patients.

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