Original Article

Evaluation of the Quality of Nursing Care Received by Patients

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Abstract

Aim: Nurses are responsible for the primary care of patients. This study was carried out to determine the patients' perception of quality of nursing care and the factors affecting it.

Methods: 448 inpatients in a training and research hospital constituted the sample of the research carried out as a descriptive study.

Results: It was determined that there was no relationship between the ages of the patients and the total point averages of the nursing care quality perceptions of the patients and that the total point averages of the caring behaviors inventory-24 of the patients who were informed by the nurse before the care were significantly higher compared to other patients.

Conclusions: It can be said that the quality of care perceived by the patients is high and that being informed by the nurses before the care positively affects the perception of quality of care.

Key words: Patient; Nurse; Nursing Care; Quality of Care

Introduction

The concept of care constitutes the basis of nursing (Palese et al., 2011; Karlou et al., 2015). Care, which is the independent function of nurse, represents a basic human need (Elayan & Ahmad, 2017). Its main aim is to decrease the pain and distress of the patient and it is one of the most important determinants of quality in health services (Kilic & Oztunc 2015; Edvardsson et al., 2017). Therefore, it is indispensable for both patients and nurses (He et al., 2013).

High quality care is a patient's right and the responsibility of nurses (Elayan & Ahmad, 2017). Since nurses are the healthcare professionals who spend the most time with the patients during hospital stay (He et al., 2013), the feeling that the patients perceive as a sense of care originates from the care behaviors of nurses (Papastavrou et al., 2012). The economic constraints in health care systems, the demand for improving the quality of care, and the inclusion of patients' opinions in the care have revealed the need for a clear understanding of nursing behaviors (Papastavrou et al., 2012).

Therefore, it is necessary to investigate the prevalence of the nurse's care behaviors for a high-quality care (Edvardsson et al., 2015). Quality care given by nurses is positively reflected on the reduction in the duration of stay in the hospital and costs, the improvement in patient outcomes, and the patient's perception and satisfaction about the quality of nursing care (Palese et al., 2011; Kursun & Kanan 2012; He et al., 2013; Edvardsson et al., 2017; Cerit & Coskun 2018).

It has been indicated that patient experiences are influential in the conceptualization of health and nursing care practices and the quality of care and can be used to evaluate and improve nursing practices (Edvardsson et al., 2017). Furthermore, it has been emphasized that patients' reviews related to care are extremely important for the development of a nursing service adapted according to the needs, expectations and individuality of patients (Papastavrou et al., 2012). Moreover, it has been also stated that the identification and accurate understanding of the perceptions of the individuals receiving care may help to increase the quality of care and thus the quality of service (Kilic & Oztunc 2015).

Therefore, in this study, it was thought that the determination of the level of the quality of nursing care perceived by patients and the investigation of the factors affecting it would contribute to give and improve a quality nursing care, to meet patients' expectations for care and to increase patient satisfaction.

Aim of the Research: The aim of this study was to determine the patients' perceptions of the quality of nursing care and the factors affecting them.

Materials and Methods

It is a descriptive cross-sectional study. The study was carried out in a training and research hospital located in a province in the Central Anatolia region of Turkey. The patients receiving inpatient treatment in internal and surgical clinics of the hospital where the study was carried out between April-June 2018 constituted the population of the study. 448 patients who agreed to participate in the study, were staying in the service for at least 3 days, were above the age of 18 years and conscious and had no mental problem and communication difficulty constituted the sample of the study.

Data Collection Tools: The "Personal Information Form" and the "Caring Behaviours Inventory-24" (CBI-24) were used in the collection of research data. The research data were collected by face-to-face interview method after the aim of the study was explained to patients and their voluntary participation was ensured.

Personal Information Form: The Personal Information Form developed by the researchers consists of the questions aimed at determining socio-demographic characteristics of patients such as age, gender and marital status, and the clinic stayed, the states of undergoing an operation and keeping a hospital attendant available.

Caring Behaviors Inventory-24 (CBI-24): CBI-24 was developed by Wolf et al. (Wolf et al., 1994). CBI-24, the short form of the 42-item "Caring Behaviors Inventory" which is suitable for bidirectional diagnosis by patients and nurses, was structured by Wu et al. (Wu et al., 2006). Its Turkish validity and reliability study was conducted by Kursun and Kanan (Kursun & Kanan 2012). For the sum of the scale, the Cronbach's alpha value was found to be 0.97 in

patients and .96 in nurses. The scale consists of 4 sub-dimensions including assurance, knowledgeskill, respectful and connectedness, and 24 items. It is a 6-point likert (1=never, 6=always) scale. The calculation of total scale score is obtained by dividing the score obtained after adding the points of 24 items by 24. As the total scale score and sub-dimension scale score increase, the quality of care perceived by the patients or nurses increases.¹⁰ In this study, the Cronbach's alpha value was found to be 0.90 in patients.

Ethical Aspect of the Study

For the study, permissions were received from the Human Research Ethics Committee (protocol no: 2018/7) of a university, the institution where the study was carried out, and the patients participating in the study.

Analysis of Data: Data analysis was performed using the SPSS 21.0 (Statistical Package for package Social Science) program. The Kolmogorov Smirnov and the Shapiro-Wilk tests were used in the evaluation of the suitability of research data for normal distribution. The percentage distributions, the significance test of the difference between two averages, correlation, variance and Kruskal-Wallis analysis were used in the evaluation of data. The level of significance was considered to be p<0.05 in all tests.

Limitations of the Study: The study is limited to inpatients in the internal and surgical clinics of the training and research hospital where the study was carried out, so the results cannot be generalized.

Results

The total CBI-24 point average of the patients was 5.19 ± 0.66 . While the patients' total point average of the "assurance" sub-dimension of the CBI-24 was 5.32 ± 0.67 , total point average of the "knowledge-skill" sub-dimension was 5.24 ± 0.75 , total point average of the "respectful" sub-dimension was 5.11 ± 0.75 and total point average of the "connectedness" sub-dimension was 5.03 ± 0.85 (Table 1).

The average age of the patients participating in the study was 59.14 ± 17.97 . In the correlation analysis, it was found that there was no relationship between the age of the patients and the total CBI-24 point average (r: 0.01 p= 0.83) (Table 2).

While the average age of the patients was 59.14 ± 17.97 , it was determined that 51.3% of them were female, 72.5% of them were married,

50.9% of them were primary school graduates, 81.7% of them were working, 49.6% of them were living in the city, 59.8% of them found their economic income sufficient, 65% of them stayed in the internal clinic, 65.6% of them had a chronic disease, 81.9% of them had previous hospital experience, 76.1% of them had an operation experience, 71.4% of them had a hospital attendant, the hospital attendants of 54% of them stayed continuously, and 88.4% of them were informed by the nurse before the practices to be conducted before care (Table 2).

No statistically significant difference was found between total CBI-24 point averages of the patients according to gender, marital status, educational and working status, place of living, economic situation, the clinic where treatment was received, having a chronic disease, previous hospitalization and surgery experience, keeping a hospital attendant available and the type of the stay of hospital attendant (p>0.05) (Table 2). It was determined that total CBI-24 point averages of the patients who were informed by the nurses before the care were significantly higher compared to other patients (p<0.05) (Table 2).

When CBI-24 item point averages of the patients were examined, it was determined that the item point averages were quite close to each other, that the behaviors with the highest point average were "Timely administration of the patient's treatments and medications", "Keeping patient's information secret" and "Treating the patient as an individual", and that the behaviors with the lowest point average were "Identification or empathizing with the patient", "Training or informing the patient" and "Ensuring the patient's participation in the planning of care" (Table 3).

Total and Sub-Dimension	X±SD	Min-Max
Assurance	5.32±0.67	1-6
Knowledge and skill	5.24±0.75	1-6
Respectful	5.11±0.75	1-6
Connectedness	5.03±0.85	1-6
Total	5.19±0.66	1-6

Table 2. Distribution of CBI-24 Point Average according to Descriptive (Characteristics of
Patients	

1 attents					
Diagnostic features		n	%	X±SD	Test/p
Age (mean±SD)		448		59.14±17.97	r:0.01 p=0.83
Gender					
	Female	230	51.3	5.24 ± 0.61	t=1.52 p=0.12
	Male	218	48.7	5.14 ± 0.70	
Marital status					
	Single	123	27.5	5.18±0.63	t=0.16 p=0.87
	Married	325	72.5	5.20±0.67	
Education status					
	Illiterate	142	31.7	5.21±0.68	
	Literate	23	5.2	4.95±0.83	
	Primary School	228	50.9	5.20±0.61	$\chi^2 = 3.79 \text{ p} = 0.43^*$
	High school	36	8.0	5.11±0.81	
	University	19	4.2	5.37±0.41	
Working status					
	Employed	82	18.3	5.16±0.64	t=0.53 p=0.59
	Unemployed	366	81.7	5.20±0.66	_

Place of living

I have of myning					
	Province	222	49.6	5.21±0.69	
	District	59	13.2	5.15 ± 0.61	F=0.22 p=0.79
	Town-village-small town	167	37.2	5.19±0.64	
Economic situation					
	Sufficient	268	59.8	5.19±0.69	t=0.05 p=0.95
	Insufficient	180	40.2	5.19 ± 0.61	
Clinic where treatme	nt is received				
	Internal	291	65.0	5.16±0.70	t=1.34 p=0.18
	Surgical	157	35.0	5.58 ± 0.57	
State of having a chr	onic disease				
	Yes	294	65.6	5.18±0.70	t=0.59 p=0.55
	No	154	34.4	5.22±0.57	
Previous hospital exp	erience				
	Yes	367	81.9	5.19±0.67	t=0.02 p=0.97
	No	81	18.1	5.19±0.58	
Surgery experience					
	Yes	341	76.1	5.18±0.68	t= 0.91 p= 0.36
	No	107	23.9	5.24±0.59	
State of keeping a hospital attendant available					
	Yes	320	71.4	5.21±0.64	t=0.70 p= 0.47
	No	128	28.6	5.16±0.71	
Type of the stay of hospital attendant					
	No hospital attendant	128	28.6	5.20±0.68	
	Stays continuously	242	54.0	5.22±0.62	F=0.84 p=0.43
	Stays at certain hours	78	17.4	5.11±0.72	-
State of being informed by the nurse before the care					
	Those who receive	e 52	11.6	4.81±0.87	t=3.47 p=0.000
	Those who do not receive information	e 396	88.4	5.24±0.61	

*Kruskal Wallis test

Table 3. CBI-24 item point averages of the patients for CBI-24 items

Behaviors Assurance Subscale Q16 Going to the patient eagerly Q17 Talking to the patient						
Q16 Going to the patient eagerly	Behaviors					
Q17 Talking to the patient	5.20±1,09					
	5.24±1.03					
Q18 Encourage the patient to call when he/she has a problem	5.14 ± 1.14					
Q20 Immediate response to the patient's call	5.34±0.92					
Q21 Helping to reduce the patient's pain	5.37±0.86					

Q22	Showing interest in the patient	5.27±0.94			
Q23	Timely administration of the patient's treatments and medications	5.63±0.71			
Q24	Relieving the patient's symptoms	5.24 ± 0.82			
Knowle	dge-skill Subscale				
Q9	To know how to administer interventions such as injection and intravenous	5.05 ± 1.26			
Q10	Giving confidence to the patient	$5.20{\pm}1.03$			
Q11	Showing professional/occupational knowledge and skills	5.18 ± 1.06			
Q12	Using tools and equipment skillfully	5.26±0.95			
Q15	Keeping patient's information secret	5.51±0.93			
Respectful Subscale					
Q1	Listening to the patient carefully	5.30±0.95			
Q3	Treating the patient as an individual	5.45 ± 0.90			
Q5	Supporting the patient	5.04 ± 1.11			
Q6	Identification or empathizing with the patient	4.86±1.19			
Q13	To allow the patient to explain his/her feelings about the disease or treatment	5.08±1.13			
Q19	Meeting the patient's needs that he/she has or has not mentioned	4.96±1.09			
Connectedness Subscale					
Q2	Training or informing the patient	4.90±1.26			
Q4	To spare time for the patient	5.07±1.12			
Q7	Helping/supporting the patient's development	5.02 ± 1.16			
Q8	Being patient and understanding towards the patient	$5.20{\pm}1.09$			
Q14	Ensuring the patient's participation in the planning of care	4.96±1.21			
Total S	cale	5.19±0.66			

Discussion

The perceptions of patients about the quality of nursing care are important with respect to reflecting the quality of the service provided. In the present study, the quality of care perceived by the patients was found to be high. This result is in line with similar studies in the literature (Palese et al., 2011; Zhao & Akkadechanunt 2011; Papastavrou et al., 2012; He et al., 2013; Cevik & Eser 2014; Karlou et al., 2015; Kilic & Oztunc 2015; Yılmaz et al., 2017; Findik & Yesilyurt 2017; Cerit & Coskun 2018). This can be interpreted that patients generally perceive the quality of nursing care at the desired level.

It was observed that the patients had the highest perception of quality of nursing care in the

"assurance" sub-dimension while they had the lowest perception of quality of nursing care in the "connectedness" sub-dimension. Although these results are in parallel with the study of Kilic and Oztunc (2015), it was stated in most studies that the highest perception of quality of nursing care was experienced in the "knowledgeskill" sub-dimension while the lowest perception of quality of nursing care was experienced in the "connectedness" sub-dimension (Palese et al., 2011; Papastavrou et al., 2012; He et al., 2013; Hajinezhad & Azodi 2014; Karlou et al., 2015; Findik & Yesilyurt 2017; Yılmaz et al., 2017; Cerit & Coskun 2018). However, while Elayan and Ahmad (2017) indicated that good communication skills and meeting the needs of patients, as well as having a high level of knowledge and skills and being competent in clinical skills, were perceived as high-quality care, Edvardson et al. (2017) indicated that the aspects that are mostly related to the perceived quality of nursing care were contactable staff, timely assistance, environmental support, as well as receiving the best possible care from knowledgeable staff. These results can be interpreted that not only knowledge and skill but also the assurance including the behaviors such as taking care of the patient and immediate response to the patient's call are now further appreciated by the patients and affect their perceptions of the quality of care.

When the patients' perceptions of the quality of nursing care were examined according to their descriptive characteristics, it was determined that there was no relationship between the age of the patients and their perception of quality of nursing care scores. The fact that age does not affect the patients' perceptions of quality of care was determined in the studies that were carried out using the same scale is similar to our study results (Cevik & Eser 2014; Findik & Yesilyurt 2017).

In this study, as well as in the literature, it was found that gender (Yılmaz et al., 2017, Findik & Yesilyurt 2017), marital status (Yılmaz et al., 2017, Findik & Yesilyurt 2017, Cevik & Eser 2014) and educational status (Yılmaz et al., 2017, Findik & Yesilyurt 2017, Cevik & Eser 2014), working status, place of living (Yılmaz et al., 2017), economic situation (Yılmaz et al., 2017), the clinic where treatment is received, having chronic a disease, previous hospitalization and surgery experiences did not affect the perception of quality of care (Findik & Yesilyurt 2017). Differently, in their study, Cevik and Eser (2014) found that the patients who were male and had no hospital experience had higher perceptions of quality of care. These results were supported by the relevant previous studies. Karlou et al. (2015) stated that there was only a weak relationship between the patients' educational status and perceptions of care.

It was indicated that most of the patient needs were met since each patient is accompanied by a hospital attendant and their expectations from nursing care decreased, which may ensure that patients perceive the quality of nursing care at higher levels (Cevik & Eser 2014). In their study, Karlou et al. (2015) found only a weak relationship between hospital attendant and the perceptions of care. However, in this study, it was found that the state of keeping a hospital attendant available and the type of the stay of hospital attendant did not affect the patients' perceptions of quality of nursing care. This suggests that nurses are able to perform their roles and responsibilities related to care at a level to meet patient expectations and to reflect it on patient care.

The results of the study show that being informed by the nurse before the care improves the perception of the quality of nursing care (Table 2). This result is similar to the results of other studies (Elayan & Ahmad, 2017, Findik & Yesilyurt 2017). To inform the patients before the procedures to be performed is thought to be effective in improving the quality of care perceived by the patients since it will prevent the patients' uncertainties about the procedures to be administered to them and decrease the existing anxiety by ensuring that the patients have knowledge about the qualifications of the care given.

It was determined that the behaviors in which the patients perceived the quality of care at the highest level were "Timely administration of the patient's treatments and medications", "Keeping patient's information secret" and "Treating the patient as an individual". When the literature is reviewed, similar to our study results, it is seen that "timely administration of the patient's treatments and medications" (He et al., 2013, Cevik & Eser 2014; Karlou et al., 2015, Kilic & Oztunc 2015), "keeping patient's information secret" (Yılmaz et al., 2017) and "treating the patient as an individual" (Elayan & Ahmad, 2017) are among the behaviors to which importance is given. This situation suggests that these behaviors were fulfilled by nurses at the desired level, increased their satisfaction and positively affected the patients' perceptions of quality of nursing care. It can be also said that timely treatment of patients by nurses, respecting their privacy and to ensure that they feel that they are valued have effects on the high level quality of care perceived by them.

Patients have various expectations regarding their care during their stay in the hospital, and to meet the perceived needs as the goal of nursing practices is important for a good care (Kilic & Oztunc 2015). In this study, it was determined that the behaviors in which the patients perceived the quality of care at the lowest level were

"Identification or empathizing with the patient", "Training or informing the patient" and "Ensuring the patient's participation in the planning of care" (Table 3). In parallel with this study, it is remarkable that "Identification or empathizing with the patient" (Cevik & Eser 2014; Kilic & Oztunc 2015), "Training or informing the patient" (Palese et al., 2011, Kilic & Oztunc 2015, Yılmaz et al., 2017) and "Ensuring the patient's participation in the planning of care" (Palese et al., 2011; Karlou et al., 2015,) are among the less scored behaviors in other studies. In their study, Elayan and Ahmad (2017) determined that the inclusion of patients in the care process by the nurses was perceived to be important by the participants. The results of the study carried out show that the patients themselves are not sufficiently understood, cannot receive information at the desired level and cannot have a part in taking the responsibilities of their own care at the desired level. Furthermore, it is stated that the difficulties such as the insufficiency of the number of nurses, medical supplies and equipment affect the time spent with the patients and the quality of the therapeutic relationship between the patient and nurse (Elayan & Ahmad, 2017). Moreover, it has been emphasized that the nurses spend most of their time to perform the medical orders of the doctor and have little time for the psychological care of the patient (He et al., 2013). The results of the study point out that all these difficulties experienced may negatively affect identification or empathizing with the patient, training or informing the patient and ensuring the patient's participation in the planning of care and that it is necessary to determine the preventive factors and to take necessary measures in order to increase the application of these care behaviors.

Conclusion: As a result of the study, it was found that the quality of nursing care given in internal and surgical clinics was perceived to be very positive by the patients and that being informed before the procedures applied positively affected the perception of quality of care. Furthermore, it was determined that the behaviors in which the patients perceived the quality of care at the lowest level were "identification or empathizing with the patient", "training or informing the patient" and "ensuring the patient's participation in the planning of care".

In line with these results; It is recommended to provide trainings aimed at increasing

awareness on informing of the patients before the procedures to be applied by the nurses both before graduation and in the clinical environment, to empathize with the patients, to provide patients with trainings or information, to determine the factors that prevent or reduce the participation of patients in the planning of care and to take necessary measures.

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