

# Patients' Perceptions of Knowledge, Trust, and Connectedness in Nurses' Caring Behaviors'

## Bilgi, Güven ve Bağlılık Boyutunda Hastaların Hemşire Bakım Davranışı Algıları

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\* Bu araştırma makalesi, 26-29 Nisan 2017 tarihinde Antalya'da gerçekleştirilen 11. Uluslararası Sağlıkta Kalite, Akreditasyon ve Hasta Güvenliği Kongresi'nde sözel bildiri (özet) olarak sunulmuştur.

### ABSTRACT

**Introduction and Aim:** Caring behaviors can be defined by a nurses' actions, behaviors, and attitudes, all of which include his/her interest, trust, concern, and ability to be with patients and provide care for them. This research is conducted to examine the perceptions of nurse's caring behaviors of the patient in a university hospital.

**Methods:** This study was conducted with 455 patients that were hospitalized in medical and surgical clinics. All data were collected with a patient identification form and the Caring Behaviors Inventory Scale-24.

**Results:** In this study, 53% of the patients were treated in surgical clinics and 47% in medical clinics. The mean age of the patients was 51.54±16.22, and the mean length of hospital stay was 8.98±11.55 days. The average score on the Caring Behaviors Inventory-24 was 5.22±0.78. The patients gave high scores in the subdimensions of "knowledge and skill" (5.45±0.73), while they gave lower scores in the subdimensions of "connectedness" (5.02±1.00) and "respectful" (5.04±0.95). There were no significant differences between patients treated according to the admitted clinic ( $p<0.05$ ) in terms of mean scale scores regarding patient gender, education level, occupation, residence, or length of hospitalization. However, there were significant differences in the presence of a family caregiver during the hospital stay and reason for choosing the hospital ( $p<0.05$ ).

**Conclusion:** As a result of the research, it was determined that the perceptions of the patients about nursing caring behaviors were positive. In particular, the patients' perceptions of the technical features of care and the caring behaviors in the connectedness subdimension were positive. The research can increase the awareness of nurses about caring behavior and provide thinking in line with the expectations of the patients. Further research can help in planning interventions for areas that patients care about for improving the quality of nursing care.

**Keywords:** Behavior, caring, nursing, patients, perception.

### ÖZ

**Giriş ve Amaç:** Bakım davranışları, hemşirelerin hastaya karşı ilgisini, güvenini, kaygısını ileten, hastanın yanında olmayı ve onun için bir şeyler yapmayı içeren eylem, davranış ve tutumlar olarak ifade edilmektedir. Araştırma, bir üniversite hastanesinde yatan hastaların hemşire bakım davranışlarına yönelik algılarının incelenmesi amacıyla yapılmıştır.

**Yöntem:** Araştırma bir üniversite hastanesinin iç hastalıkları ve cerrahi kliniklerde yatan 455 hasta ile gerçekleştirilmiştir. Araştırma verileri "Hasta Tanıtım Formu" ve "Bakım Davranışları Ölçeği-24" ile toplanmıştır.

**Bulgular:** Araştırmaya %53'ü cerrahi kliniklerde, %47'si iç hastalıkları kliniklerinde tedavi edilmekte olan hastalar dâhil edilmiştir. Hastaların yaş ortalamaları 51.54±16.22 ve hastanede kalış süreleri ortalama 8.98±11.55 gün olarak bulunmuştur. Bakım Davranışı Ölçeği-24 toplam puan ortalaması 5.22±0.78 olarak elde edilmiştir. Hastalar, "Bilgi-Beceri" alt boyutunda yer alan ifadeleri yüksek puanlarken (5.45±0.73), "Bağlılık" (5.02±1.00) ve "Saygılı Olma" (5.04±0.95) alt boyutunda yer alan maddeleri daha düşük puanla değerlendirmişlerdir. Hastanın cinsiyeti, eğitim düzeyi, meslek türü, hastaneye yatış sayısının ölçek puan ortalamasında istatistiksel farklılık oluşturmadığı ( $p>0.05$ ), refakatçi durumu ve hastaneyi tercih nedeninin istatistiksel olarak anlamlı farklılık oluşturduğu belirlenmiştir ( $p<0.05$ ).

**Sonuç:** Araştırma sonucunda hastaların hemşire bakım davranışına yönelik algılarının olumlu olduğu belirlenmiştir. Özellikle hastaların, bakımın teknik yönü ve güven boyutundaki bakım davranışlarına yönelik algıları olumlu bulunmuştur. Araştırma hemşirelerin bakım davranışına yönelik farkındalığını artırabilir ve hastaların beklentileri doğrultusunda düşünmeyi sağlayabilir. Araştırma hemşirelik bakımının kalitesini artırmada hastaların önemseydiği alanlara yönelik girişimlerin planlanmasında yardımcı olabilir.

**Anahtar kelimeler:** Davranış, bakım, hemşirelik, hasta, algı.

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Caring is a universal phenomenon acknowledged as the essence of nursing. It also has been a subject that has always been on the agenda because it is the basic concept of the nursing profession. Since the 1980s, nursing literature has focused on the nature of the concept of caring and caring behaviors.<sup>(1,2)</sup> It is difficult to understand a single definition of the concept of caring. One of the definitions of caring is defined as a moral obligation, affectivity, personality, interpersonal interaction, and therapeutic intervention.<sup>(3)</sup> Human existence, respect, positive communication, and professional knowledge/skill are the roots consisting of care.<sup>(4)</sup> Caring behaviors are expressed as actions, behaviors, and attitudes that involve the nurses' interest, trust, concern, and also to be with and care for them.<sup>(5,6)</sup> Caring behavior is the only way of conveying the knowledge and skills of the nurse to the patient and it constitutes an indispensable part of the nursing services.<sup>(7,8)</sup> Caring behavior is the only way for the nurse to make the patient feel the readiness of care, worry for the patient, and presence for care. Jean Watson<sup>(2)</sup> states that nursing care can only be effective by the use of caring behaviors and the perception of these behaviors by patients. Caring behaviors include listening carefully, eye contact, relieving the patient, taking responsibility for the patient, honesty, touching, sensitivity, respect, offering verbal assurance, physical and mental availability.<sup>(2)</sup>

Nowadays, caregiving perception or satisfaction measurements are mostly done in the evaluation of nursing services and nursing care. Since satisfaction and perception of care are the general evaluation, they are influenced by the attitudes and behaviors of nurses and other health professionals or by institutional structural factors. Indeed, the measurement that shows the nursing care directly is the assessment based on the nursing care and care actions which are shown to the patients, and the perception of the patients about this nursing care and care actions. For this reason, studies that measure both the perception of caring and caring behaviors, have been screened together, especially in the national literature review.

Perceptions and opinions about the caring and caring behaviors of patients are frequently used to evaluate the quality of care.<sup>(9)</sup> According to the studies made for this purpose, it has been determined that patients interpret caring and caring behaviors differently depending on the nurse. According to the results of the research, while the nurses value for emotional elements such as "comfort" and "trust relationship"; patients value for technical actions such as "knowing how drugs will be implemented and how the equipment will be used", "observations and monitoring" more.<sup>(10-12)</sup> Studies evaluating the nursing care perception of patients with a single measurement tools are insufficient for an objective evaluation of nursing care. Nurses' attitude towards the patient, their caring behaviors, and self-care constitute nurse care. As a matter of fact, there are studies examining the relation of the evaluations of the nurses' caring behaviors performed by the nurses, and the patients' satisfaction. The patients whose positive perceptions of caring behaviors were also determined

to have a high level of satisfaction.<sup>(13-15)</sup>

Although caring is a universal phenomenon, caring behaviors and the way of how caring show varies according to cultural norms.<sup>(1)</sup> In some societies, the situations that nurse touch the patient, make eye contact with the patient, and talk with the patients are perceived as establishing trust whereas they are considered disrespectful in some societies.<sup>(16)</sup> In a survey conducted in three regional hospitals with different cultural structures in Saudi Arabia, it was determined that patients perceived the caring as humanism, faith, hope, sensitivity, supportive/protective/corrective environment and human needs assistance.<sup>(17)</sup> In studies conducted in our country, it was found that patients perceived the caring as knowledge-skills, respect, empathy, tolerance, interest and cheerfulness.<sup>(18-22)</sup>

The studies on the evaluation of nursing care in our country as in the whole world are mostly evaluated based on the dimensions such as the perception of caring concept, quality of care perception,<sup>(23,24)</sup> perception of nursing care,<sup>(18,22)</sup> nursing satisfaction.<sup>(19-21,25-27)</sup> Caring that patients often mention and perceive in researches has been reported that "medical treatments that are implemented correctly/reliably" and "the trust of the level of professional knowledge of nurses".<sup>(19,21,23)</sup> On the other hand, patients reported dissatisfaction with dimensions of their involvement in self-care, information and empathy.<sup>(18,19,24,25,27)</sup> All the expressions of dissatisfaction of the patients on the maintenance perceptions are negative for the "Caring Behaviors" which the patients expect from the nurses.

For this reason, assessments related to nursing care must be conducted with the measurement of caring behavior that contributes to directly evaluate the nursing care that is given. Moreover, regular assessments of these evaluations at certain intervals ensure that the quality of the maintenance is accelerated. The research was carried out to examine the perceptions of nurses' caring behaviors of patients in a university hospital.

## Methods

### Design

This study aimed to examine the perceptions of nurse's caring behaviors of the patient in a university hospital. This study was a descriptive study design.

### Setting and participants

The research was conducted in a university hospital with a capacity of 1200 beds, and it is a regional hospital that cares for a large number of patients from Antalya and nearby areas. This hospital is one of the leading institutions for organ transplantation in Turkey. The research was conducted in all clinics except psychiatry, pediatrics, intensive care units, outpatient clinics and emergency services. Patients in these clinics were not included in the study because of the cognitive

characteristics, their age groups and their remote treatment. The clinics where the study was conducted are similar in terms of the number of patients per nurse in the clinics, patient rooms and clinical characteristics. The nurses work in three shifts from 08.00 to 16.00, 16.00-24.00, and 24.00-08.00. In each clinic, there are two staff nurses and one clinical head nurse during the daytime and only two staff nurses during the night. One nurse in each shift gives care to approximately 17 patients. Nurses are responsible for implementing medical treatments, caring, training and counselling in clinics.

The study's population consists of patients in medical and surgical clinics in a period extending from August 2016 to January 2017. The number of samples was found to be at least 143 patients for each of the medical and surgical clinics with a 95% confidence interval and 5% type 1 error level with the use of Wu et al.<sup>(28)</sup> Caring Behavior Inventory-24 (CBI-24) (4.29±0.61) score average. Eligibility criteria for this study were as follows: patients who are hospitalized at least 48 hours, literate, have no hearing or speech-impaired and agreed to participate in the study. The study was conducted with 485 patients. The data from 30 patients were not included because of lack of information gathered. The response rate to the survey was 94%. Probability sampling method was used in the research. Patients were selected with simple random sampling until an equal number of samples were obtained from each clinic.

### Data collection tool

The research data were collected with "Patient Identification Form" and "CBI-24". Patient Identification form consist of nine domain which are the sociodemographic characteristics of the patient (age, sex, educational level, occupation), presence of a chronic disease and required continuous treatment, the length of hospitalization, the presence of family caregiver, the reason why the patient choose the hospital, admitted clinic (medical/surgical).

CBI-24 is a short form of "Caring Behavior Inventory-42" developed by Wolf et al.<sup>(29)</sup> The inventory was designed to evaluate the nursing process and is used to compare nurses' self-assessments and patients' perceptions.<sup>(13,28)</sup> The validity and reliability study of the Turkish version of the scale was carried out by Kursun and Kanan.<sup>(30)</sup> CBI-24 consists of 4 sub-dimensions and 24 items: assurance (8 items), knowledge and skill (5 items), respectful (6 items) and connectedness (5 items). Scale items were designed with a Likert type consisting of six options. Total scale point and sub-dimension scores are obtained by dividing the total scores of the items by the item number, and the obtained score is between 1 and 6 points. In the validity and reliability study of the inventory, the total Cronbach's alpha value was found to be 0.97 in the whole inventory and 0.89-0.93 in the sub-dimensions.<sup>(30)</sup> In this research, for all of the inventory, Cronbach's Alpha score was 0.95, and the score for sub-dimensions was found to be between 0.85-0.92.

### Data collection

The research data were collected by three researchers. The clinics included in the study were divided into three, and a number of the area where each researcher was to collect data was detected. Research data were collected from patients who were decided to be discharged, whose discharged procedure was ended, and who were proper for research. Face to face method was used to collect the data. The purpose of the investigation was explained to the patient, and written approval was obtained. After the patient approved to attend the study, they were kindly asked to fill out the data collection tools. For those who did not want to answer the scale items themselves, the researchers read the questions and marked for them. The data were collected from each patient in approximately 15 minutes.

### Ethical aspects

The study was conducted according to ethical principles for non-invasive medical research and was approved by Medical Research Ethics Board (Ethics Committee Date: 09.05.2016, Decision Number: 221). Participation was voluntary, informed consent was obtained.

### Data analysis

All data analyses were performed using SPSS for Windows Version 23.00 (IBM Corporation, Armonk, New York, USA). Descriptive statistics (per cent, mean, standard deviation) were used, and the normality of the distribution was assessed based on the skewness and kurtosis values of data obtained from the CBI-24. Since the skewness and kurtosis values were not between -1 and +1, it was determined that the mean scale score was not normally distributed. The Mann-Whitney U test was performed when comparing two groups, and the Kruskal-Wallis test was used when comparing more than two groups. Values of  $p < 0.05$  were accepted as significant.

## Results

### Patient characteristics

A total of 455 patients participated in the study, and 53% of them in surgical clinics and 47% in medical clinics. 52.3% of the patients were female, marital status, 78.1% were married, educational level, 44.2% were high school graduates (Table 1). In the age group, participants were between 18 and 92 and the mean age of them was 51.54±16.22. The duration of staying hospital the patients was a minimum of 2 days and a maximum of 145 days, and mean days of 8.98±11.55 days (Table 1). The number of patients who were admitted for hospitalization for the first time was 29.9%. It is found that the patients selected university hospital for some reasons. Among the total number of patients, 36.3% of them were referred, 26.2% of them were recommended, 24.8% of them had their own doctor in the hospital, and 12.7% of them believed that they would take good care (Table 1).

**Table 1.** Patient Characteristics and CBI-24 Point Averages (n = 455)

Demographic Characteristics	n	%	Scale score Mean±SD	Statistical significance*
<b>Sex</b>				
Female	238	52.3	5.24±0.79	Z=-0.956 p=0.339
Male	217	47.7	5.21±0.76	
<b>Age</b>				
18-45 years	155	34.1	5.26±0.83	χ <sup>2</sup> =1.851 p=0.396
46-60 years	156	34.3	5.19±0.75	
61 and older	144	31.6	5.22±0.75	
<b>Education level</b>				
Elementary school	148	32.5	5.19±0.86	χ <sup>2</sup> =1.582 p=0.453
High school	201	44.2	5.19±0.77	
Undergraduate and graduate	106	23.3	5.34±0.66	
<b>Occupation</b>				
Worker	157	34.5	5.15±0.83	χ <sup>2</sup> =3.639 p=0.303
Public servant	42	9.2	5.42±0.70	
Retired	83	18.2	5.29±0.69	
Housewife	173	38.0	5.21±0.78	
<b>Admitted clinic</b>				
Medical Clinic	214	47	5.19±0.79	Z=-0.887 p=0.375
Surgical Clinic	241	53	5.25±0.77	
<b>Presence of family caregiver</b>				
Yes	390	85.7	5.27±0.75	Z=-3.449 p=0.001
No	65	14.3	4.92±0.92	
<b>Presence of a chronic disease</b>				
Yes	246	54.1	5.21±0.73	Z=-0.968 p=0.333
No	209	45.9	5.23±0.82	
<b>Reason for choosing the hospital</b>				
Transfer	165	36.3	5.16±0.85	χ <sup>2</sup> =21.888 p<0.001
Advice	119	26.2	5.15±0.78	
Doctor is here	113	24.8	5.19±0.70	
Believed that he/she would receive good care	58	12.7	5.61±0.59	
<b>Length of hospitalization</b>				
2-5 day	212	46.6	5.19±0.75	χ <sup>2</sup> =2.441 p=0.295
6-10 day	148	32.5	5.23±0.81	
11 or more days	95	20.9	5.29±0.78	
<b>Total</b>	<b>455</b>	<b>100</b>	<b>5.22±0.78</b>	

\*The Mann-Whitney U test was performed when comparing two groups, and the Kruskal-Wallis test was used when comparing more than two groups.

**Table 2.** Patients Perceptions of CBI-24 Subscales

Subscale	Mean±SD	Median (range)
Knowledge and Skill	5.45±0.73	5.80 (1.60-6)
Assurance of the Human Presence	5.35±0.78	5.62 (2.25-6)
Respectful Deference of Others	5.04±0.95	5.33 (1.83-6)
Positive Connectedness	5.02±1.00	5.40 (1.20-6)

### Patients perceptions of CBI-24 sub-dimensions

The mean item score for the caring behaviors scored by the patients participating in the study was found to be 5.22 (SD=0.78) and the highest score was found 6. According to caring behavior examination of sub-dimensions of the inventory, the patients assess the items with high scores in the sub-dimensions "Knowledge and Skill" (5.45±0.73), while they assess with lower scores in the sub-dimensions "Connectedness" (5.02±1.00) and "Respectful" (5.04±0.95) (Table 2).

There was no statistically significant correlation between CBI-24 sub-dimensions and total item score averages and sex, educational level, occupation of the patient, number of hospitalization (p>0.05). However, it was determined that who have family caregiver during the hospital stay and who preferred the university hospital because they believed that they took a

**Table 3.** Patients Perceptions of CBI-24 Items

Caring Behaviors	Mean±SD
<b>Knowledge-skill</b>	
9) Knowing how to give shots, IVs, etc.	5.48±0.90
10) Being confident with the patient	5.43±0.94
11) Demonstrating professional knowledge and skill	5.45±0.90
12) Managing equipment skillfully	5.49±0.84
15) Treating patient information confidentially	5.40±0.86
<b>Assurance</b>	
16) Returning to the patient voluntarily	5.24±1.00
17) Talking with the patient	5.29±0.99
18) Encouraging patient to call if there are problems	5.25±1.06
20) Responding quickly to the patient's call	5.18±1.10
21) Helping to reduce the patient's pain	5.45±0.90
22) Showing concern for the patient	5.30±0.98
23) Giving the patient's treatments and medications on time*	5.58±0.76
24) Relieving the patient's symptoms	5.48±0.88
<b>Respectful</b>	
1) Attentively listening to the patient	5.24±0.96
3) Treating the patient as an individual	5.32±1.00
5) Supporting the patient	5.05±1.23
6) Being empathetic or identifying with the patient	4.92±1.34
13) Allowing the patient to express feelings about his or her disease and treatment**	4.63±1.65
19) Meeting the patient's stated and unstated needs	5.10±1.16
<b>Connectedness</b>	
2) Giving instructions or teaching the patient	5.08±1.34
4) Spending time with the patient	4.85±1.21
7) Helping the patient grow	5.09±1.02
8) Being patient or tireless with the patient	5.25±1.40
14) Including the patient in planning his or her care	4.82±1.16

\*Highest rated scale item \*\*Lowest rated scale item

good care were found to be statistically significantly higher CBI-24 item scores than those who preferred the university hospital because of other reasons and who do not have family caregiver (Table 1).

### Patients' perceptions of CBI-24 items

The three caring behaviors that patients gave the highest points were “giving the patient’s treatments and medications on time”, “managing equipment skillfully”, and “helping to reduce the patient’s pain” respectively. The three caring behaviors that patients give the lowest points were “spending time to the patient”, “providing patient participation in the care plan” and “allowing the patient to express feelings about his or her disease and treatment” (Table 3).

### Discussion

Results of this study indicate that the caring behaviors with the highest mean CBI-24 total item scores ( $5.22 \pm 0.78$ ) and the highest mean item scores were in the sub-dimension of knowledge-skill (i.e. managing equipment skillfully) and assurance (i.e., giving the patient’s treatments and medications on time, relieving the patients’ symptoms). In a qualitative study including in-depth interviews of 199 patients in a large public hospital, patients defined the nursing care they received based on the following criteria: “providing for my needs,” “treating me pleasantly,” “caring about me,” “being competent,” and “providing prompt care”.<sup>(31)</sup> In that study, it was found that the patients’ perceptions of caring changed in accordance with the assurance that their pains/aches would be relieved and that their needs would be met in simultaneously. A Turkish nationwide multicenter study including 2272 patients found that patient perceptions of nursing care were 80.4% positive and the highest rated measurements were those of trust, such as “feeling well that they cared thanks to nurses” and “being sure that the nurses will be there when needed”.<sup>(22)</sup> In a systematic review by Drahosova and Jarosova,<sup>(32)</sup> it was stated that patients define care as “giving trust”. In caregiving and satisfaction studies, it has been found that the most important issues always include trust of the caregiver and receiving treatment and care in the fastest and most systematic way possible.<sup>(8,14,27,33,34)</sup>

Except for urgent requirements for care and treatment, when patients are asked for the assessment of the method and quality of the service, more detailed and multidimensional data were obtained. In this study, while patients rated the “knowledge-skill” sub-dimension, which was related to the application of the patient’s treatment and problem-solving, with the highest mean score, rating the “respectful” and “connectedness” sub-dimension were significantly lower. A review examining the relationship between patient experience and caregiving revealed that patients had a more positive perception of caring behaviors when a caregiver is competent in terms of knowledge and skills, is sensitive and thoughtful, when the caregiver establishes

effective communication, give confidence to the patient, and includes the patients in their treatment.<sup>(35)</sup> Studies conducted in Turkey regarding perceptions of nursing care reported that the highest item score averages were related to the nurses’ knowledge-skill, accessibility, and trust in problem-solving; however, individualized care items, such as spending time to the patient, listening and informing to them, and inclusion in the treatment process received the lowest item point averages.<sup>(23,24,36)</sup> In a survey of patient satisfaction with nursing, only 23% of the patients stated that nurses came to “listen to their problems” and “provide information”.<sup>(37)</sup> Oflaz and Vural<sup>(37)</sup> also reported that while nurses frequently visit patient rooms for follow-up and treatment interventions, they could not devote time to the emotional problems of the patient. Similarly, in this study, the lowest CBI-24 scores were “spending time to the patient”, “including the patient in planning his or her care”, and “allowing the patient to express feelings about his or her disease and treatment”. In the study by Papastavrou et al.,<sup>(38)</sup> patients stated that nurses’ caring behaviors, such as “talking to patients”, “responding to calls”, and “showing interest to the patients” did not happen frequently enough.

As seen in this research and other research results, it is clear that the nursing care perception of the patients is limited to the technical skills and that the caring behaviors are not adequately met according to the patients. Some studies suggest that within the context of individualized patient care, the failure of nurses to perform certain caring behaviors such as listening to the patient, giving patients time to express themselves, providing information, and including patients in their own treatment can be explained by certain individual and institutional factors.<sup>(39-41)</sup> Drahosova and Jarosova<sup>(32)</sup> emphasized that high workload, insufficient staff, and limited time allocated for the care of each patient affect the quality of care, and therefore, in these situations, nurses prioritize the treatment and basic needs of their patients. Tervo-Heikkinen et al.<sup>(42)</sup> reported that the patient/nurse ratio in each shift, the time spent with each patient, and the nurses’ qualifications are among the important factors affecting patient satisfaction scores. In addition, it was reported that a nurses’ emotional care behaviors are influenced by his/her own life philosophy, faith, responsibility, self-sacrifice, burnout level, and psychological problems; all of these may affect a nurses’ ability to effectively communicate with his/her patients.<sup>(43-45)</sup>

### Limitations and recommendation for future research

The selection of only one hospital in the Mediterranean Region for research is the most important limitation of the study. In addition, although the evaluation of patient perception by using scales gives measurable results, it is necessary to evaluate the patient perception by qualitative methods according to individual experiences. For the future studies, it is recommended to investigate the perceptions of nurses’ caring behavior and the factors affecting the perceptions together with the patients and nurses.

## Conclusion

As a result of the research, it was found that the perceptions of the patients about the nurses' caring behavior were at a good level. Patients largely agree that the technical aspects of care and assurance are the most common behaviors.

## Acknowledgements

The authors would like to thank all of the patients who participated in this study.

**Teşekkür:** Araştırmacılar çalışmaya katılımı kabul eden tüm katılımcılara teşekkür etmektedirler.

**Acknowledgement:** The researchers would like to thank all participants who agreed to participate in the study.

<b>Etik Komite Onayı:</b> Bu çalışma için etik komite onayı, Akdeniz Üniversitesi Tıbbi Araştırmalar Etik Kurulundan alınmıştır (Tarih: 09.05.2016 ve No. 221).	<b>Ethics Committee Approval:</b> Ethics committee approval was received for this study from the Akdeniz University Medical Research Ethics Board (Date: 09.05.2016 and number: 221).
<b>Bilgilendirilmiş Onam:</b> Çalışmaya katılan hastalardan onam alınmıştır.	<b>Informed Consent:</b> Informed consent was obtained from participants.
<b>Hakem Değerlendirmesi:</b> Dış bağımsız.	<b>Peer-review:</b> Externally peer-reviewed.
<b>Çıkar Çatışması:</b> Yazar çıkar çatışması olmadığını belirtmiştir.	<b>Conflict of Interest:</b> No conflict of interest was declared by the author.
<b>Finansal Destek:</b> Yazarlar bu çalışma için finansal destek almadığını açıklamışlardır.	<b>Financial Disclosure:</b> The author declared that this study has received no financial support.

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## REFERENCES

- Leininger MM. Caring: An essential human need: Proceedings of the Three National Caring Conferences. Michigan: Wayne State University Press; 1981.
- Watson J. Nursing the philosophy and science of caring. Revised ed. United States: University Press of Colorado; 2008.
- Morse JM, Solberg SM, Neander WL, Bottorff JL, Johnson JL. Concepts of caring and caring as a concept. *ANS Adv Nurs Sci.* 1990;13(1):1-14. doi: 10.1097/00012272-199009000-00002.
- Radwin L. Oncology patients' perceptions of quality nursing care. *Res Nurs Health.* 2000;23(3):179-90. doi: 10.1002/1098-240X(200006)23:3<179::AID-NUR2>3.0.CO;2-T.
- Brilowski GA, Wandler MC. An evolutionary concept analysis of caring. *J Adv Nurs.* 2005;50(6):641-50. doi: 10.1111/j.1365-2648.2005.03449.x.
- Larson PJ. Important nurse caring behaviors perceived by patients with cancer. In: Smith MC, Turkel MC, Wolf ZR, editors. *Caring in nursing classics: An essential resource.* New York: Springer Publishing Company; 2013. p. 283-91.
- Papastavrou E, Efstathiou G, Charalambous A. Nurses' and patients' perceptions of caring behaviours: quantitative systematic review of comparative studies. *J Adv Nurs.* 2011;67(6):1191-205. doi: 10.1111/j.1365-2648.2010.05580.x.
- Karlou C, Papathanassoglou E, Patiraki E. Caring behaviours in cancer care in Greece. Comparison of patients', their caregivers' and nurses' perceptions. *Eur J Oncol Nurs.* 2015;19(3):244-50. doi: 10.1016/j.ejon.2014.11.005.
- Azizi-Fini I, Mousavi MS, Mazroui-Sabdani A, Adib-Hajbaghery M. Correlation between nurses' caring behaviors and patients' satisfaction. *Nurs Midwifery Stud.* 2012;1(1):36-40. Available from: <http://eprints.kaums.ac.ir/1206/1/Correlation%20Between%20Nurses%E2%80%99%20Caring.pdf>
- O'Connell E, Landers M. The importance of critical care nurses' caring behaviours as perceived by nurses and relatives. *Intensive Crit Care Nurs.* 2008;24(6):349-58. doi: 10.1016/j.iccn.2008.04.002.
- Zamanzadeh V, Azimzadeh R, Rahmani A, Valizadeh L. Oncology patients' and professional nurses' perceptions of important nurse caring behaviors. *BMC Nurs.* 2010;9(1):10. doi: 10.1186/1472-6955-9-10.
- Modic MB, Siedlecki SL, Griffin MTQ, Fitzpatrick CJJ. Caring behaviors: Perceptions of acute care nurses and hospitalized patients with diabetes. *J Patient Exp.* 2014;1(1):26-30. doi: 10.1177/237437431400100107.
- Wolf ZR, Miller PA, Devine M. Relationship between nurse caring and patient satisfaction in patients undergoing invasive cardiac procedures. *Medsurg Nurs.* 2003;12(6):391-6. Available from: <https://pubmed.ncbi.nlm.nih.gov/14725151/>
- Chang Y, Lin YP, Chang HJ, Lin CC. Cancer patient and staff ratings of caring behaviors: Relationship to level of pain intensity. *Cancer Nurs.* 2005;28(5):331-9. doi: 10.1097/00002820-200509000-00001.
- Henderson A, Van Eps MA, Pearson K, James C, Henderson P, Osborne Y. 'Caring for' behaviours that indicate to patients that nurses 'care about' them. *J Adv Nurs.* 2007;60(2):146-53. doi: 10.1111/j.1365-2648.2007.04382.x.
- Potter PA, Perry AG, Stockert PA, Hall AM. *Caring in nursing practice.* In: *Fundamentals of Nursing.* 8th ed. Canada: Elsevier; 2013.
- Suliman WA, Welmann E, Omer T, Thomas L. Applying Watson's nursing theory to assess patient perceptions of being cared for in a multicultural environment. *J Nurs Res.* 2009;17(4):293-300. doi: 10.1097/JNR.0b013e3181c122a3.
- Ipek Coban G, Kasikci M. Patients' perceptions of nursing care. *Florence Nightingale Journal of Nursing.* 2008;16(63):165-71.
- Arslan C, Kelleci M. Satisfaction levels of hospitalized patients in care of nursing in a university hospital and some related factors. *Journal of Anatolia Nursing and Health Sciences.* 2011;14(1):1-8.
- Sendir M, Büyükyılmaz F, Yazgan I, Bakan N, Mutlu A, Tekin F. Evaluation of experience and satisfaction with nursing care in orthopedic and traumatology patients. *Florence Nightingale Journal of Nursing.* 2012;20(1):35-42.
- Kayrakci F, Özşaker E. Determination of the surgical patients' satisfaction levels from nursing care. *Florence Nightingale Journal of Nursing.* 2014;22(2):105-13.
- Kol E, Geckil E, Arkan C, İltar M, Özcan O, Sakırgun E, et al. Examination of nursing care perception in Turkey. *Acibadem University Health Sciences Journal.* 2017;8(3):163-72.
- Çevik K, Eser I. Dependency levels of inpatients effect of nursing care quality's perception in neurosurgery clinic. *Florence Nightingale Journal of Nursing.* 2014;22(2):76-83.
- Yıldız Fındık U, Soydaş Yeşilyurt D. Surgical patients' perception of the postoperative nursing care quality. *Journal of Anatolia Nursing and Health Sciences.* 2017;20(3):195-200.
- Aksakal T, Bilgili N. The evaluation of satisfaction with nursing care; an example of gynaecology service. *Erciyes Med J.* 2008;30(4):242-9.
- Arslan S, Nazik E, Tanrıverdi D, Gurdil S. Determining the level of satisfaction of patients in nursing care and health services. *TAF Prev Med Bull.* 2012;11(6):717-24.
- Sise S. Satisfaction of patients with nursing care. *Kocatepe Medical Journal.* 2013; 14:69-75.

28. Wu Y, Larrabee JH, Putman HP. Caring behaviors inventory: A reduction of the 42-item instrument. *Nurs Res.* 2006;55(1):18-25.
29. Wolf ZR, Giardino ER, Osborne PA, Ambrose MS. Dimensions of nurse caring. *The J Nurs Scholarsh.* 1994;26(2):107-12. doi: 10.1111/j.1547-5069.1994.tb00927.x.
30. Kursun S, Kanan N. Validity and reliability study of the Turkish version of Caring Behaviors Inventory-24. *Journal of Anatolia Nursing and Health Sciences.* 2012;15(4):229-35.
31. Larrabee JH, Bolden LV. Defining patient-perceived quality of nursing care. *J Nurs Care Qual.* 2001;16(1):34-60. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11668855>
32. Drahosova L, Jarosova D. Concept caring in nursing. *Cent Eur J Nurs Midwifery.* 2016;7(2):453-60. doi: 10.15452/CEJNM.2016.07.0014.
33. Papastavrou E, Efstathiou G, Tsangari H, Suhonen R, Leino-Kilpi H, Patiraki E, et al. Patients' and nurses' perceptions of respect and human presence through caring behaviours: A comparative study. *Nurs Ethics.* 2012;19(3):369-79. doi: 10.1177/0969733011436027.
34. Omari FH, Abu AlRub R, Ayasreh IR. Perceptions of patients and nurses towards nurse caring behaviors in coronary care units in Jordan. *J Clin Nurs.* 2013;22(21-22):3183-91. doi: 10.1111/jocn.12458.
35. Gillespie H, Kelly M, Duggan S, Dorman T. How do patients experience caring? Scoping review. *Patient Educ Couns.* 2017;100(9):1622-33. doi: 10.1016/j.pec.2017.03.029.
36. Dikmen Y, Yılmaz D. Patient's perceptions of nursing care-a descriptive study from Turkey. *Ann Nurs Prac.* 2016;3(3):1048.
37. Oflaz F, Vural H. The evaluation of nurses and nursing activities through the perceptions of inpatients. *Int Nurs Rev.* 2010;57(2):232-9. doi: 10.1111/j.1466-7657.2009.00772.x.
38. Papastavrou E, Efstathiou G, Tsangari H, Suhonen R, Leino-Kilpi H, Patiraki E, et al. A cross-cultural study of the concept of caring through behaviours: patients' and nurses' perspectives in six different EU countries. *J Adv Nurs.* 2012;68(5):1026-37. doi: 10.1111/j.1365-2648.2011.05807.x.
39. Enns CL, Sawatzky JAV. Emergency nurses' perspectives: Factors affecting caring. *J Emerg Nurs.* 2016;42(3):240-5. doi: 10.1016/j.jen.2015.12.003.
40. Sarafis P, Rousaki E, Tsounis A, Malliarou M, Lahana L, Bamidis P, et al. The impact of occupational stress on nurses' caring behaviors and their health related quality of life. *BMC Nurs.* 2016;15(1):56. doi: 10.1186/s12912-016-0178-y.
41. Wiechula R, Conroy T, Kitson AL, Marshall RJ, Whitaker N, Rasmussen P. Umbrella review of the evidence: What factors influence the caring relationship between a nurse and patient? *J Adv Nurs.* 2016;72(4):723-34. doi: 10.1111/jan.12862.
42. Tervo-Heikkinen T, Kvist T, Partanen P, Vehviläinen-Julkunen K, Aalto P. Patient satisfaction as a positive nursing outcome. *J Nurs Care Qual.* 2008;23(1):58-65. doi: 10.1097/01.NCQ.0000303806.09242.37.
43. Attree M. Patients' and relatives' experiences and perspectives of 'good' and 'not so good' quality care. *J Adv Nurs.* 2001;33(4):456-66. doi: 10.1046/j.1365-2648.2001.01689.x.
44. Rafii F, Oskouie F, Nikravesh M. Caring behaviors of burn nurses and the related factors. *Burns.* 2007;33(3):299-305. doi: 10.1016/j.burns.2006.10.397.
45. Chana N, Kennedy P, Chessell ZJ. Nursing staffs' emotional well-being and caring behaviours. *J Clin Nurs.* 2015;24(19-20):2835-48. doi: 10.1111/jocn.12891.