

## Patient-Centered Care Competence of Surgical Nurses: A Cross-Sectional Study in Türkiye

### Cerrahi Hemşirelerinin Hasta Merkezli Bakım Yetkinlikleri: Türkiye'den Kesitsel Bir Çalışma

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#### Abstract

**Background:** This descriptive and cross-sectional study was conducted to determine the patient-centered care competence of nurses working in surgical units.

**Materials and Methods:** The research was conducted with nurses working in the surgical clinics of university hospitals in Türkiye between January and September 2021. The data were collected using the Descriptive Information Form and Patient-Centered Care Competence Scale (PCCS). All nurses were invited to participate on a voluntary basis and 310 nurses filled out the questionnaire.

**Results:** In the comparison of the PCCS sub-dimensions with the descriptive features, a significant relationship was found between the nurses' age and years of experience and the sub-dimension mean scores of respecting the patient's perspectives. There was a significant relationship between the gender and education level of nurses and the mean sub-dimension scores for respecting patient perspectives, encouraging patient participation in care processes, and defending patients' rights.

**Conclusions:** The results of the study showed that the patient-centered care competency of surgical nurses was high.

**Key Words:** Competence, Nursing, Patient-Centered Care, Surgical

#### Öz

**Amaç:** Tanımlayıcı ve kesitsel tipte olan bu araştırma, cerrahi birimlerde çalışan hemşirelerin hasta merkezli bakım yetkinliklerini belirlemek amacıyla yapılmıştır.

**Materyal ve Metod:** Araştırma, Ocak-Eylül 2021 tarihleri arasında Türkiye'deki üniversite hastanelerinin cerrahi kliniklerinde çalışan hemşireler ile yapılmıştır. Veriler Tanımlayıcı Bilgi Formu ve Hasta Merkezli Bakım Yeterlilik Ölçeği (HMBÖ) kullanılarak toplanmıştır. Tüm hemşireler gönüllü olarak katılmaya davet edildi ve 310 hemşire anketi doldurdu.

**Bulgular:** HMBÖ alt boyutları ile tanımlayıcı özellikler karşılaştırıldığında, hemşirelerin yaşı ve deneyim yılı ile hastanın bakış açısına saygı alt boyut puan ortalamaları arasında anlamlı bir ilişki bulunmuştur. Hemşirelerin cinsiyeti ve eğitim durumu ile hasta bakış açısına saygı duyma, bakım süreçlerine hasta katılımını teşvik etme ve hasta haklarını savunma alt boyut puan ortalamaları arasında anlamlı bir ilişki vardı.

**Sonuç:** Çalışmanın sonuçları cerrahi hemşirelerinin hasta merkezli bakım yetkinliklerinin yüksek olduğunu göstermiştir.

**Anahtar Kelimeler:** Cerrahi, Hasta Merkezli Bakım, Hemşirelik, Yetkinlik

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## Introduction

Patient-centered care is regarded as a type of holistic care that covers all inpatient care processes, including comforting room design, emotional support to the patient, personalization of meals, and support of the patient's decision-making process (1, 2). It also includes providing care that is responsive to and representative of the individual's preferences, needs, and values, and enabling patient values to guide clinical decisions (3, 4).

It is seen that patient-centered care provides an increase in patient satisfaction, a decrease in health costs, and an increase in the quality of care (1, 5). The patient-centered care approach is considered the main component of patient safety. Identifying and understanding patients' values, needs, and preferences; conveying those to other members of the healthcare team; and applying them in nursing care will facilitate patient participation in healthcare (6, 7). Patient-centered care is most important in surgical clinics and for individuals receiving care in those clinics. Individuals who received perioperative care in surgical clinics stated that they would like to receive care from a professional with whom they feel safe (8). The self-management power of individuals who take responsibility for their own health care during the care process will also increase (9, 10). For this reason, it is necessary to increase the patient-centered care competence of nurses to ensure patients' participation in their own care. In the study conducted by Hwang et al. (2015), patient participation was more common in the practices of nurses with high competence in patient-centered care (6).

Patient-centered care is the process that keeps the patient alive during an illness and includes allocating time to the individual in need of care, putting professional knowledge into practice, getting to know the patient, and developing a relationship. This process takes place during nurse-patient interactions, is maintained in the continuation of care, and is reinforced by knowledge practices (1, 2). Today, patient-centered holistic care is recommended in health care (1, 5, 11). Patient-centered care is also considered a measure of the quality of health services (4). Factors affecting patient satisfaction in health services should be taken into account when increasing the quality of patient care (8, 12). Especially in surgical clinics, the more complicated approaches employed, such as preoperative patient preparation and intraoperative and postoperative care, make it important to raise the issue of patient-centered care. Professional competence is a critical qualification for safe, ethical, and high-quality care. Therefore, there is a need for competency assessment (13). Hence, our study was conducted to determine the patient-centered care competence of nurses working in surgical units.

## Materials and Methods

### Type of Research

The research was conducted as a descriptive and cross-sectional study to determine the patient-centered care competence of nurses working in surgical units.

### Place and Time of Research

The research was carried out with nurses working in the surgical clinics of university hospitals in Türkiye between January and September 2021.

### Population and Sample of the Research

The population of the study consisted of all nurses working in the surgical clinics of university hospitals in Türkiye. G-Power 3.0.10 package program was used to determine the sample of the study. Accordingly, the calculation was made to have a medium effect size, 0.05 margin of error, and 0.95 power of the study, and it was determined that 262 nurses should be included in the sample (14, 15). Considering that there may be losses from the sample, the number of nurses meeting 15% was included and the sample was completed with the participation of 310 nurses. Nurses who worked in surgical clinics at the time of the study, answered the questionnaire questions, and agreed to participate in the study were included in the study.

### Data Collection Tools

The data were collected using the Descriptive Information Form and Patient-centered Care Competence Scale (PCCS).

### Introductory Information Form

This was created by the researchers in line with the literature. It consisted of a total of 6 questions about the sociodemographic characteristics of the nurses such as age, gender, marital status, education level, and years of experience (1, 6, 11).

### Patient-Centered Care Competence Scale (PCCS)

The scale was developed by Hwang et al. in 2015, and Arslanoğlu and Kırılmaz confirmed the validity and reliability of the Turkish version in 2019 (6, 11). The PCCS is a 5-point Likert-type scale and consists of 4 sub-dimensions and a total of 17 items. The scale has the following sub-dimensions: respecting patients' perspectives, encouraging patient participation in care processes, providing patient comfort, and defending patients' rights. The Cronbach's alpha coefficient of the scale was calculated as 0.85 (11). In this study, the coefficient was 0.93.

### Data Collection

Before applying the questionnaire to the nurses, permission was obtained from all university hospitals via a cover letter. In addition, a web-based survey link was sent to the universities that allow surveys. All nurses were invited to participate in the study on a voluntary basis and a total of 310 nurses responded to the questionnaire.

### Data Analysis

The data were analyzed using SPSS 21.0. In the analysis, number, percentage, standard deviation, mean, minimum, and maximum values were used for the demographic data. Normal distribution fitness of variables was investigated using Kolmogorov-Smirnov and Shapiro Wilk tests. The Mann-

Whitney U and Kruskal–Wallis tests were used for the measurement values that did not conform to the normal distribution.  $P < 0.05$  was set as the significance level.

### Ethical Aspect of the Research

Ethics committee approval for the study was obtained from the Clinical Research Ethics Committee of a university in the south of Türkiye on 10.11.2020 (Issue No: 73). In addition, written permission was obtained from the university hospitals where the research was conducted. During the study, the principles set out in the Declaration of Helsinki were followed.

### Results

Some 66.5% of the nurses participating in the research were 35 years old or under, 76.8% were women, 55.5% were married. 83.9% of them had undergraduate or higher degrees. Moreover, 65.8% reported that they had worked as a nurse for 10 years or less (Table 1).

According to the findings we obtained, the total mean PCCS score of the nurses was  $4.19 \pm 0.51$ .

The mean scores for the PCCS sub-dimensions were as follows: respecting patient perspectives  $4.12 \pm 0.53$ , encouraging patient participation in care processes  $4.11 \pm 0.56$ , ensuring patient comfort  $4.30 \pm 0.63$ , and defending patients' rights  $4.23 \pm 0.60$  (Table 2).

**Table 1.** Distribution of Nurses by Descriptive Characteristics (n=310)

Descriptive Characteristics	Number (n)	Percentage %
<b>Age</b>		
35 years and ≤	203	66,5
35 years ≥	107	34,5
<b>Gender</b>		
Female	238	76,8
Male	72	23,2
<b>Marital status</b>		
Married	172	55,5
Single	138	44,5
<b>Level of Education</b>		
Health vocational high School	26	8,4
Associate Degree	24	7,7
Undergraduate and Postgraduate	260	83,9
<b>Years of Professional Work</b>		
10 years and ≤	204	65,8
10 years ≥	106	34,2

**Table 2.** PCCS Scores of Nurses (n=310)

	Min-Max. Point	Mean±SD*
<b>PCCS and its Sub-Dimensions</b>		
Respecting patient perspectives (6 items)	1,67-5,00	4,12±0,53
Encouraging Patient Participation in Care Processes (5 items)	1,80-5,00	4,11±0,56
Providing Patient Comfort (3 items)	1,00-5,00	4,30±0,63
Defending the Rights of Patients (3 items)	1,00-5,00	4,23±0,60
PCCS Total (17 items)	1,45-5,00	4,19±0,51

\*SD=Standard deviation

In the present study, there was a statistically significant relationship in favor of female nurses only according to the sex variable in the comparison between the total mean scores of the nurses' PCCS and their descriptive information ( $p < 0.05$ ).

In the comparison of the PCCS sub-dimensions with the descriptive features, a significant relationship was found between the nurses' age and years of experience and the

mean score of respecting the patient's perspectives ( $p < 0.05$ ).

A significant relationship was also found between the nurses' sex and education level and the sub-dimension mean scores of respecting patient perspectives, encouraging patient participation in care processes, and defending patients' rights ( $p < 0.05$ ) (Table 3).

**Table 3.** Comparison of PCCS Sub-Dimension Scores According to Nurses' Descriptive Characteristics (n=310)

Descriptive Characteristics	Respecting Patient Perspectives	Encouraging Patient Participation in Care Processes	Providing Patient Comfort	Defending the Rights of Patients	PCCS Total
<b>Age</b>					
35 years and ≤	4,17±0,50	4,15±0,56	4,30±0,64	4,23±0,60	4,21±0,51
35 years ≥	4,02±0,55	4,05±0,56	4,30±0,63	4,22±0,59	4,15±0,50
Test Value*	Z =-2,794 P=0,005	Z =-1,144 P=0,254	Z =-0,259 P=0,795	Z =-0,139 P=0,889	Z =-1,085 P=0,278
<b>Gender</b>					
Female	4,16±0,52	4,13±0,58	4,32±0,64	4,26±0,60	4,22±0,51
Male	4,00±0,54	4,05±0,50	4,23±0,60	4,10±0,58	4,09±0,47
Test Value*	Z =-2,443 P=0,015	Z =-1,896 P=0,054	Z =-1,514 P=0,130	Z =-2,339 P=0,019	Z =-2,387 P=0,017
<b>Marital status</b>					
Married	4,09±0,57	4,09±0,58	4,29±0,63	4,19±0,59	4,17±0,53
Single	4,16±0,46	4,14±0,54	4,31±0,64	4,27±0,60	4,22±0,47
Test Value*	Z =-0,664 P=0,520	Z =-0,575 P=0,565	Z =-0,249 P=0,804	Z =-1,087 P=0,277	Z =-0,980 P=0,327
<b>Level of Education</b>					
Undergraduate and Postgraduate	4,39±0,40	4,20±0,90	4,37±0,79	4,53±0,46	4,37±0,58
Associate Degree	4,15±0,37	3,95±0,46	4,34±0,37	4,27±0,51	4,18±0,30
Health vocational high School	4,09±0,54	4,12±0,52	4,29±0,64	4,19±0,61	4,17±0,51
Test Value**	KW=8,619 P=0,013	KW=7,316 P=0,026	KW=1,708 P=0,426	KW=7,571 P=0,023	KW=5,269 P=0,072
<b>Years of Professional Work</b>					
10 years and ≤	4,18±0,47	4,15±0,54	4,30±0,62	4,24±0,58	4,22±0,48
10 years ≥	4,01±0,60	4,04±0,59	4,29±0,67	4,20±0,63	4,13±0,55
Test Value*	Z =-2,587 P=0,010	Z =-1,190 P=0,234	Z =-0,257 P=0,797	Z =-0,172 P=0,863	Z =-1,005 P=0,315

\*Mann-Whitney U test, \*\*Kruskal Wallis test

## Discussion

Patient-centered care is increasingly recognized as the foundation of quality and patient safety (4). The findings obtained in our research show that nurses have a very good level of patient-centered care competence. Similar results were obtained in other studies as well (1, 4, 16).

In the present study, the highest average score was for the sub-dimension providing patient comfort. The concept of comfort in nursing care management is defined as the process of diagnosing the comfort needs of the individual who needs care as a function or result of nursing, planning nursing interventions for the needs that cannot be met and evaluating the basic comfort level and the comfort level after the application (17, 18). The nurse has a comforting role. Within the framework of this role, during treatment and care it is possible for the patient to identify and meet their own needs, and especially to support those who cannot meet their needs by their own means (19). Review of the relevant literature no study was found using the same scale. In another study, in which a different scale was used, nurses received high scores for activities that ensure patient safety, including patient comfort (4).

In the present study, the second highest score was for defending the rights of patients. No study was found using the same scale. In addition to patient care, nurses are expected to know and apply patient rights very thoroughly. The level of knowledge about their advocacy role, which also includes autonomy, can sometimes differ even among nurses. These deficiencies and differences are directly reflected in patient outcomes (20). The advocacy role of nurses enables patients to express themselves and to defend their rights. Thus, it can make the health system more sensitive to patient rights, controlled, and against injustices (21). Defending the rights of patients is important in terms of quality, efficiency, and satisfaction and is one of the ethical codes of nursing.

In the present study, the nurses received high scores for the respecting perspectives sub-dimension. It was reported that as empathy increases, patient-centeredness increases, which is consistent with our results (22). Understanding the patient, empathizing, and respecting the patient's perspectives are the basic approaches in nursing care. These aspects of the nurses who participated in our study appeared to be good.

Although the score obtained from the sub-dimension encouraging patient participation in care processes was high,

it was in fourth place. Hwang et al. (2019) reported that patient participation was more frequent in the practices of nurses with higher competence in patient-centered care (6). Patient participation is very important for patient-centered care. Both patients and nurses need to be empowered to participate in patient care. It has also been reported that the development of patient decision support tools and their integration into clinical pathways are important for the implementation of more patient-centered care (23).

Review of the results related to patient-centered care competence of the nurses in terms of demographic variables showed that there was a significant relationship between the age of the nurses and the sub-dimension mean scores of respecting the patient's perspectives. In our study, the average score was higher in nurses aged 35 or younger. Consistent with our findings, Flinkman et al. (2016) reported that there was a positive correlation between age and the competence of nurses (13). Contrary to the findings of our study, there are also studies reporting that there is no relationship between age and patient-centered care competence (1, 4).

A significant relationship was found between the gender of the nurses and the mean scores of all sub-dimensions and the total mean scores of the PCCS, except for ensuring patient comfort. In contrast to the results of our research, two previous studies reported that there was no relationship between sex and patient-centered care competence (1, 4). In this country, where the patriarchal social structure is dominant, male nurses may also have been influential in the decision-making process as they regard themselves as competent.

Among the nurses with undergraduate and higher degrees, mean scores for the respecting patients' perspectives, encouraging patient participation in care processes, and defending patients' rights sub-dimensions were higher than the others, and the difference was significant. In a systematic analysis, a positive correlation was reported between higher education and the level of proficiency of nurses (13). Contrary to these findings, two other studies reported that there was no significant difference between the groups (1, 4). Many of the participants in this study consisted of nurses with undergraduate and higher degrees. Regarding ethical values in nursing, emphasizing the principles of obtaining consent, protecting patient rights, and respecting autonomy more in undergraduate and higher education may have been influential (24, 25).

### Limitations

The first limitation of this study is that it cannot reach definite conclusions due to its cross-sectional nature. Randomized controlled studies are needed to reach more conclusive evidence.

The second limitation is that it was conducted only with nurses working in university hospitals providing tertiary health care and who agreed to participate voluntarily in the study.

### Conclusions

According to the results of this research, the care competence of nurses is high. According to the results of this research, nurses' care proficiency is high. The highest level of competence of nurses is in the dimension of providing patient comfort. In addition, as a result of the research, it was seen that the competencies of respecting the perspectives of the patients, encouraging the participation of the patients in the care processes and defending the patient's rights were affected by the demographic characteristics of the nurses. This result may be associated with the commitment of surgical nurses to professional values. In order to maintain the professional perspective of nurses, it can be suggested that the working conditions of nurses should be improved, and positive behaviors should be rewarded.

Evaluating the competence of nurses in patient care will ensure that care is provided in professional competence, safe, in accordance with ethical principles and of high quality. Strengthening the patient-centered care competence of nurses will increase the job satisfaction of nurses as well as providing outputs in favor of low cost and patient satisfaction in clinical practice.

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**Ethical Approval:** Ethics committee approval for the study was obtained from the Clinical Research Ethics Committee of Toros University on 10.11.2020 (Issue No: 73). In addition, written permission was obtained from the university hospitals where the research was conducted. During the study, the principles set out in the Declaration of Helsinki were followed.

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Design : B.S., L.Z.A., A.D.

Data acquisition: A.D.

Analysis and interpretation: L.Z.A.

Writing manuscript: B.S., L.Z.A., A.D.

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