

SURGICAL PATIENTS' SATISFACTION LEVEL WITH NURSING CARE

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Summary

Introduction: Patient satisfaction is valuable in terms of evaluating the nursing care process, increasing the quality of care, and providing better quality of care. Regularly evaluating patient satisfaction and making necessary arrangements in nursing practices in line with patient expectations is important. This descriptive and cross-sectional study was conducted to determine the satisfaction levels of surgical patients with nursing care.

Material and methods: Data were collected using the personal information form and the Newcastle Satisfaction with Nursing Care Scale (NSNCS). A face-to-face interview technique was used to collect the data. The sample of the descriptive study consisted of 186 surgical patients of a public hospital in Northern Cyprus.

Results: The mean score of NSNCS of the patients was 92.05 ± 9.04 . While there was a significant difference between the patients' satisfaction with nursing care according to the variables of marital status, education level, number and duration of hospitalization, and development variables in terms of nursing care ($p > 0.05$), no significant differences were found according to gender, health insurance, and employment status.

Conclusions: As a result, the surgical patients included in this study were quite satisfied with nursing care during their hospitalization, which supports maintaining the same order of nursing care and even improving it as much as possible in terms of patient satisfaction.

Key words: nursing care, quality of care, patient satisfaction, Newcastle Satisfaction with Nursing Care Scale.

Introduction

Surgical interventions cause many physiological and psychological changes in the individuals. In the postoperative period, patients need high-quality nursing care to cope with these changes [1, 2]. Satisfaction of the patient is determined by the perception level of the nursing care provided. The perception level varies according to the patient's characteristics and expectations from the nursing care. Studies report that there is a relationship between patients' perception of nursing care and their age, gender, education level, cultural background, and ethnicity [1–8].

Satisfaction of the patient is valuable in terms of evaluating the nursing care process, increasing the quality of care, and providing better quality of care [9, 10]. The importance of regularly evaluating patient satisfaction and making necessary arrangements in nursing practices in line with patients' expectations is emphasized in the studies [1–4, 6, 9, 11]. This study was

conducted to determine the satisfaction of the surgical patients with the nursing care.

Research questions

What are the satisfaction levels of the surgical patients with nursing care?

Is there any relationship between the personal information of the surgical patients and their satisfaction level with nursing care?

Material and methods

The data of this descriptive and cross-sectional study were collected in the general surgery ward of a state hospital in Northern Cyprus between December 2021 and January 2022. Surgeries performed in the general surgery department included cholelithiasis, inguinal hernia, umbilical hernia, incisional hernia, ap-

pendicitis, ileus, pancreatitis, intestinal fistulas, spleen rupture, pancreatic perforation, spleen perforation, liver abscess, thyroid, breast, stomach, spleen, liver, pancreas, and colon cancer. Approximately 80 patients applied to the outpatient clinic of the general surgery department each day, and approximately 15 patients were admitted to the ward, as well as emergencies.

The sample consisted of 186 inpatients aged 18 years and over, who underwent lower abdominal surgery with large incisions, received 3 days or more of inpatient treatment, had no hearing or vision problems, communicated well, and agreed to participate in the study.

Data collection tools

Personal information form

The personal information form developed by the researchers in line with the literature included 22 questions about age, gender, marital status, health insurance, education level, employment status, previous hospitalization, and length of hospital stay [9, 12–15].

Newcastle Satisfaction with Nursing Care Scale

The Newcastle Satisfaction with Nursing Care Scale (NSNCS) was developed by Thomas *et al.* in 1996 [16], and Turkish validity and reliability studies of the scale were conducted by Uzun in 2003. The scale is a 5-point Likert-type scale consisting of 19 items including nursing care. The score evaluation is made on a scale of 0–100 points by summing the scores of all items marked on the scale. The total score indicates satisfaction of patients with all dimensions of nursing care. In the Turkish version, the Cronbach's α value is 0.95 [17].

Data collection

The data were collected by using data collection tools and the face-to-face interview technique after obtaining verbal and written consent from a state hospital Ethics Committee with the code 06/21 dated 17 December 2021, explaining the purpose of the research to the patients. In this process, the interviews were conducted just before the discharge. The patients could evaluate their nursing care in a private room on the ward independently. It took approximately 15–20 minutes to complete the questionnaire.

Evaluation of data

In the statistical evaluation of the data, Statistical Package for Social Sciences 21.0 software was used. In the analysis of the relationship between patient characteristics and NSNCS, *t*-test for gender, marital status and health insurance variables, education level, employment status, number and duration of hospitalizations,

and one-way ANOVA for the variables of development in the direction of nursing care, and TUKEY analysis was used to determine the difference between general perceptions. Significance was evaluated as $p < 0.05$.

Results

When the descriptive information of the patients was analysed, the average age was 57.82 ± 11.00 years (minimum 18, maximum 74). The distribution of the patients constituting the sample was as follows: female 81 (43.5%), male 105 (56.5%), married 146 (78.5%), unmarried 40 (21.5%) according to marital, with health insurance 156 (83.9%) and without health insurance 30 people (16.1%); the income level was low in 7 (3.8%), medium in 74 (39.8%), high in 84 (45.2%), and very high in 21 (11.3%). According to the education level variable, 12 patients (6.5%) were literate, 71 patients (38.2%) had primary school education, 61 patients (32.8%) had high school education, and 42 patients (22.6%) had attended university. According to the variable of employment status, 77 patients (41.4%) were not working due to illness, 60 patients (32.3%) were not working for other reasons, and 49 patients (26.3%) were working. According to the variable of the number of hospitalizations, 131 patients (70.4%) were hospitalized 1–2 times, 39 patients (21.0%) were hospitalized 3–4 times, and 16 patients (8.6%) were hospitalized 5 times or more. According to the variable of length of hospitalization, 40 patients (21.5%) for 2–3 nights, 37 patients (19.9%) for 4–5 nights, 109 patients (58.6%) were hospitalized for 6 nights or more. According to the improvement variable in terms of nursing care, 5 patients (2.7%) stated that there was no improvement, 67 patients (36.0%) stated that there was improvement, and 114 patients (61.3%) stated that there was partial improvement (Table 1).

There was a significant difference between the patients' satisfaction with nursing care according to their marital status, education level, number of hospitalizations, duration of hospitalization, and improvement in terms of nursing care ($p > 0.05$). No significant differences were found according to gender, health insurance, and employment status ($p > 0.05$) (Table 1). The mean total score of the satisfaction of patients with nursing care was found to be 92.05 ± 9.04 (Table 2).

The results of *t*-test analyses of satisfaction of surgical patients with nursing care for gender, marital status, and health insurance variables revealed the following: The general scores for women ($\bar{x} = 91.92$; $SD = 8.73$) were found to be lower than the scores of men ($\bar{x} = 92.15$; $SD = 9.31$). According to the marital status of surgical patients' satisfaction with nursing care, it was found that the general scores of the married patients ($\bar{x} = 92.40$; $SD = 8.42$) were higher than those of un-

Table 1. Descriptive characteristics of surgical patients and Newcastle Satisfaction with Nursing Care Scale mean scores

Descriptive characteristics	n (%)	NSNCS $\bar{x} \pm SD$	Test
Gender			
Female	81 (43.5)	91.92 \pm 8.73	$t = 0.16$
Male	105 (56.5%)	92.15 \pm 9.31	$p = 0.18$
Marital status			
Married	146 (78.5)	92.40 \pm 8.42	$t = 0.99$
Not married	40 (21.5)	90.78 \pm 11.02	$p = 0.00^*$
Health Insurance			
Yes	156 (83.9)	92.17 \pm 8.99	$t = 0.43$
No	30 (16.1)	91.40 \pm 9.41	$p = 0.69$
Education level			
Literate	12 (6.5)	86.14 \pm 11.41	$F = 6.79$
Primary education	71 (38.2)	95.15 \pm 6.84	$p = 0.00^*$
High school	61 (32.8)	91.78 \pm 8.31	
University	42 (22.6)	88.89 \pm 10.74	
Employment status			
I am not working because of this disease	77 (41.4)	91.70 \pm 10.27	$F = 0.136$
I do not work for other reasons	60 (32.3)	92.08 \pm 6.90	$p = 0.873$
I am working	49 (26.3)	92.56 \pm 9.42	
Number of hospitalizations			
1–2 times	131 (70.4)	90.96 \pm 9.67	$F = 4.58$
3–4 times	39 (20.0)	93.46 \pm 6.28	$p = 0.01^*$
5 times or more	16 (8.6)	97.56 \pm 6.97	
Duration of hospitalization			
2–3 nights	40 (21.5)	95.52 \pm 4.83	$F = 3.953$
4–5 nights	37 (19.9%)	90.61 \pm 8.55	$p = 0.021^*$
6 nights and more	109 (58.6%)	91.26 \pm 10.06	
Improvement in terms of nursing care compared to previous hospitalizations			
Yes	67 (36.0%)	95.91 \pm 6.17	$F = 16.50$
No	5 (2.7%)	77.89 \pm 0.000	$p = 0.00^*$
Partially	114 (61.3%)	90.40 \pm 9.54	

F – one-way ANOVA, NSNCS – Newcastle Satisfaction with Nursing Care Scale, SD – standard deviation, *T* – independent samples *t*-test, \bar{x} – mean
* $p < 0.05$

Table 2. Mean total score of Newcastle Satisfaction with Nursing Care Scale

Scale	$\bar{x} \pm SD$	Points received (min–max)	Points available (min–max)
NSNCS	92.05 \pm 9.04	42–95	0–100

NSNCS – Newcastle Satisfaction with Nursing Care Scale, Max – maximum, Min – minimum, SD – standard deviation, \bar{x} – mean

married patients ($\bar{x} = 90.78$; SD = 11.02). According to the health insurance status of the patients, the general scores of those with health insurance ($\bar{x} = 92.17$; SD = 8.99) were higher than those without health insurance ($\bar{x} = 91.40$; SD = 9.41). Regarding the mean and standard deviation of the nursing care satisfaction among surgical patients according to the educational status

variable, the level among primary school graduates ($\bar{x} = 95.15$; SD = 6.84) was high, while those of literate subjects ($\bar{x} = 86.14$; SD = 11.41) were found to be lower. There was a significant difference between the nursing care satisfaction of surgical patients according to the number of times they were hospitalized ($F = 4.58$; $p = 0.01$). It was determined that there was a statisti-

cally significant difference in favour of those who were hospitalized 3–4 times compared to those who hospitalized 1–2 times ($p < 0.05$). There was a statistically significant difference in favour of those who were hospitalized for 6 nights and more, those who were hospitalized for 2–3 nights, and those who were hospitalized for 4–5 nights ($p < 0.05$) (Table 1).

Discussion

Patients' satisfaction with nursing care is one of the most important indicators of care quality and can be used as a performance measurement tool. It provides very important feedback in terms of evaluating the standards of nursing care [9, 10, 18, 19]. The mean NSNCS scores of the patients was evaluated as high. In studies conducted on this subject it was determined that the patients' satisfaction level with the nursing care they received was high in different wards [14, 20–25]. Our study data was parallel with the literature.

In a study conducted by Çankaya in Turkey [26], the satisfaction of patients with nursing care was compared, and it was found that the satisfaction with the care of patients in a private hospital was significantly higher than that of patients in a state hospital. In another study, the level of satisfaction reported in Saudi Arabian hospitals was found to be low [27], whereas in a study conducted by Alasad *et al.*, it was reported that the level of satisfaction was high – the hospital where the study was conducted is accredited, and the high standards of care can positively affect the level of satisfaction [28].

In the findings of this study, according to gender, general scores of the nursing care satisfaction of the surgical ward patients were lower in females than in males. There was no significant difference between the general perceptions of nursing care satisfaction of surgical ward patients according to their gender. Females were significantly more satisfied with nursing care than males, while there was a significant difference between the education level of the patients and their satisfaction scores, and it could be stated that the education level of the patients might be effective as the reason for the difference according to gender. Kołpa *et al.* showed that female gender was associated with greater satisfaction and higher ratings of nursing care at a same-day surgery ward [24]. Conversely, Hreńczuk [25] in Poland showed that sociodemographic data such as sex, age, education, and hospitalization time did not affect satisfaction with nursing care in a neurosurgery ward. This result may be due to the high level of nursing care required for neurosurgery patients and long-term hospitalization [25].

It was found that the general scores of the satisfaction of the surgical patients' according to their mar-

ital status were higher in the married compared to the unmarried patients. Contrary to the results of the research, Aksakal and Aksakal *et al.* found that the working and marital status of females affected satisfaction with nursing care [29]. Aldemir *et al.* concluded that marital status did not affect their patients' satisfaction with nursing care [3].

The satisfaction level of the surgical patients with nursing care was higher in patients with health insurance than in patients without health insurance, but there was no significant difference between them. In parallel with the findings of the previous study, Özyürek *et al.* found that the satisfaction level of patients who underwent emergency surgery was higher in those with health insurance [30]. Similarly to our study, some studies did not find significant correlation between health insurance and satisfaction level [20, 31, 32].

There was a significant difference in the nursing care satisfaction of surgical patients according to the education level. In the literature, it was stated that education was an especially important factor in patient satisfaction; as the education level of the patients increases, their expectations from nursing care increase and their satisfaction decreases, and women with low education were more satisfied because their expectations from nursing care were lower than those of men [23, 33–37]. In a study that compared the satisfaction with nursing care with the level of education, the level of satisfaction with the nursing care was higher in the emergency patient group in college graduates and in the elective patient group of primary school graduates, but the difference was not statistically significant [30]. Çevik *et al.* found that male patients who without hospital experience had a high level of perception of care behaviours, and that their education level did not affect the level of perception of care behaviours [38]. In another study, it was reported that the education level of the participants affected the satisfaction with nursing care. Patients with a low level of education had a low level satisfaction with nursing care [39]. Gül *et al.* determined that there was no significant difference in the nursing care satisfaction of surgical patients according to the variable patients' employment status [40]. They reached similar results with this study.

It was determined that there was a significant difference in the nursing care satisfaction of surgical patients according to the number of times they were hospitalized and the duration of hospitalization. Aldemir *et al.* stated that clinical characteristics such as the duration of hospitalization are also related to the satisfaction of the patients with the nursing care [3]. Other studies have shown different results in the relationship between patients' satisfaction with nursing care and hospitalization [9, 27, 37, 41]. Sayin *et al.* in Turkey reported that surgical patients who stayed in the hospital more than 8 days [22], and Molla *et al.* in Ethiopia

reported that patients who hospitalized for more than 10 days, had decreased satisfaction with nursing care [41]. Koirala *et al.* in India stated that there was a negative correlation between the duration of hospital stay and patient satisfaction, and patients who were hospitalized for longer tended to be less satisfied with nursing care [42]. The findings of our study are in parallel with the results of this study. Prolonged hospital stay leads to deterioration of patients' activities of daily living, thus increasing patients' needs, and as a result of this, patient satisfaction decreases.

Conclusions

In conclusion, the fact that the surgical patients included in this study were quite satisfied with nursing care during their hospitalization supports maintaining in the same order of nursing care and even improving it as much as possible in terms of patient satisfaction. The results of the study are thought to be beneficial to plan in-service training programs by discussing all satisfaction of patients' issues with nurses, to make necessary arrangements for patient expectations in nursing practices, and to consider factors related to satisfaction while providing care.

The authors declare no conflict of interest.

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