ACORN AUSTRALIAN COLLEGE OF PERIOPERATIVE NURSES | JOURNAL OF PERIOPERATIVE NURSING

Volume 37 | Issue 3 Article 6

10-3-2024

Investigation of post-operative comfort levels and factors affecting comfort in urology patients

Recommended Citation

Dolgun, Eda; Dalfidan Sayin, Büşra; Özşaker, Esma; and Candan Dönmez, Yelda (2024) "Investigation of post-operative comfort levels and factors affecting comfort in urology patients," *Journal of Perioperative Nursing*: Vol. 37 : Iss. 3 , Article 6.
Available at: https://doi.org/10.26550/2209-1092.1311

https://www.journal.acorn.org.au/jpn/vol37/iss3/6

Peer-reviewed article

Authors

Associate Professor Eda Dolgun
Ege University

Büşra Dalfidan Sayin
İzmir Katip Çelebi University

Associate Professor Esma Özşaker
Ege University

Associate Professor Yelda Candan Dönmez
Ege University

Corresponding author

Büşra Dalfidan Sayin
İzmir Katip Çelebi University

Investigation of post-operative comfort levels and factors affecting comfort in urology patients

Abstract

Purpose: To examine the post-operative comfort levels of patients who underwent surgery in the urology clinic and investigate the factors that affect post-operative comfort.

Methods: This study is a descriptive, cross-sectional study. The research was conducted in the urology clinic of a university hospital. The sample consisted of 123 participants. Data were collected using the patient identification form, the general comfort questionnaire (GCQ) and the perianesthesia comfort questionnaire (PCQ).

Results: The average age of the participants was 60.96 years (±11.97) and 89 (72.4%) were men. The total mean score for general comfort was 3.05 (±0.38) and for perianesthesia comfort was 4.93 (±0.52). When the correlation between GCQ and PCQ scores was examined, it was found that there was a positive statistically significant relationship between the two ($p<0.01$, $rs=0.572$).

Conclusion: It was determined that the general comfort of the patients was above the moderate level, and their comfort was negatively affected by pain and the presence of urinary catheters.

Keywords: comfort, nursing, post-operative, surgery, urology

Introduction

Surgical treatment can be considered as a controlled trauma that can affect patients physiologically, psychologically and socially. With technological and scientific advances, surgery has been applied for many years as a method of diagnosis and treatment for many conditions[1–4]. The surgical process begins when the patient enters the operating room, continues with anaesthesia procedures and ends when the patient is transferred to the recovery unit or intensive care unit. During surgery, patients may encounter many problems related to anaesthesia and interventions[4]. In various studies, patients have reported pain, nausea and/or vomiting, fatigue and other symptoms in the post-operative period[5–7]. These problems experienced by patients prolong the post-operative recovery period and affect the quality of life and comfort of patients.

Comfort, which is a versatile and complex concept, refers to a state of physical ease and freedom from pain in daily life[8,9]. According to the Turkish Language Association[10], comfort is 'the state of not feeling sadness, uneasiness or distress' or 'leisureliness'. Comfort can holistically be defined as finding peace or relief and meeting the basic needs of individuals when coping with problems. In the nursing literature, this process consists of determining the needs of the patient, family or society, taking necessary measures for meeting these needs, and evaluating the comfort level

after applying those measures[7,9]. Since Nightingale, comfort has been regarded as a goal and desired outcome for quality care in nursing practice. It plays an important role in holistic nursing care together with experience, dimensions or components of a dynamic process, control, quality of life, hope, reconciliation, decision making, pain control and nursing intervention and processes[7,8,11].

According to Kolcaba, who developed the theory of comfort related to health care, comfort is an 'expected result with a complex structure within the physical, psychospiritual, social and environmental integrity to provide help with the needs and problems of an individual'[12, p.14]. Kolcaba continued her studies on the holistic comfort theory for about 15 years, and in 1988 published the taxonomic structure of this theory, which has three levels (relief, ease and transcendence) and four dimensions (physical, psychospiritual, environmental and sociocultural[7,9,12,13].

While providing holistic care to the patient, nurses take the comfort theory as a guide[9,12,13]. In particular, nurses ensure that patients undergoing surgery go through this process comfortably with the help of individualised nursing care practices and planned training for recovery before surgery, after surgery and after discharge[11,14].

Nursing practices, such as mobilising patients soon after surgery, teaching deep breathing and coughing exercises, ensuring controlled transition and appropriate nutrition for the patient, play an active role in preventing the development of post-operative complications, increasing quality of life, ensuring the comfort of the patient and accelerating the healing process[3,4,15].

The aim of the present study was to examine the post-operative comfort levels and investigate factors affecting comfort of patients who underwent surgery in the urology clinic.

Materials and methods

This study was designed as descriptive and cross-sectional research. It was carried out with patients who underwent surgery in the urology clinic of a university hospital in Izmir between July 2019 and January 2020. All patients who underwent surgery at the specified clinics between the specified dates and left the intensive care unit after recovery constituted the population of the study. The study sample consisted of a total of 123 patients over the age of 18 who volunteered to participate in the study and had no communication problems.

The sample size was calculated based on data from a study conducted by Ören[2]. The impact factor was determined with the mean score of the attitude scale in this study. Using the G-Power 3.1 software, 0.35 standard deviation was determined as the smallest effect and the sample size was calculated as a total of 89 patients with 95% power, 95% confidence interval and 0.05 margin of error. Patients with any disease (dementia, psychological disorder etc.) and advanced stage cancer that could affect the patient's thought processes and decision-making ability were excluded from the study. Research data were collected through face-to-face interviews by one of the researchers. The duration of the interviews was 15 to 20 minutes.

Data collection forms were used when patients were able to answer questions after they left the intensive care unit. The data was collected using a patient information form, prepared by the researchers, the perianesthesia comfort questionnaire (PCQ) and the general comfort questionnaire (GCQ).

The patient information form consists of 27 questions about sociodemographic characteristics of the patients and surgical information.

The PCQ was created by Katherine Kolcaba and takes into account the taxonomic structure of comfort – three levels and four dimensions. The Turkish validity and reliability study of the PCQ was carried out by Üstündağ and Aslan who found the Cronbach's alpha value to be 0.83[3]. In the present study, the Cronbach's alpha value was 0.708. The PCQ consists of 24 items, both positive items and negative items that are included in a mixed order. Items are rated using a six-point Likert-type scale with negative items scored in reverse. The highest score that can be obtained is 144, and the lowest score is 24. The average score is determined by dividing the total score by the number of items. The average score is then evaluated on a scale from 1 to 6. A low score indicates poor levels of comfort and a high score indicates good comfort[3].

The GCQ was also developed by Katharine Kolcaba, in 1992, and later adapted into Turkish by Kuğuoğlu and Karabacak in 2008. The GCQ was created based on the taxonomic structure of comfort – three levels and four dimensions. The Turkish validity and reliability study of the GCQ was conducted by Kuğuoğlu and Karabacak who found the Cronbach's alpha value to be 0.85[16]. In the present study, the Cronbach's alpha value was 0.875. The GCQ consists of 48 items, in three sub-dimensions – relief (16 items), ease (17 items) and transcendence (15 items). The

Table 1: Sociodemographic characteristics of participants (N = 123)

Characteristic		n (%)
Age in years (mean±SD) 22–85 (60.96±11.97)	18–65 (young)	78 (63.4%)
	66–79 (middle-aged)	39 (31.7%)
	80–99 (old)	6 (4.9%)
Gender	men	89 (72.4%)
	women	34 (27.6%)
Literacy and education level	illiterate	7 (5.7%)
	literate	16 (13.0%)
	primary school	36 (29.3%)
	high school	41 (33.3%)
	university	23 (18.7%)
Chronic disease status	yes	64 (52.0%)
	no	59 (48.0%)
Smoking status	yes	39 (31.7%)
	no	84 (68.3%)
Alcohol use status	yes	18 (14.6%)
	no	105 (85.4%)
Companion status	yes	117 (95.1%)
	no	6 (4.9%)

SD = standard deviation

questionnaire included both positive items and negative items that are included in a mixed order. Items are rated using a four-point Likert-type scale, with negative items scored in reverse. The highest score that can be obtained from the scale is 192, and the lowest score is 48. The average score is determined by dividing the total score by the number of scale items. The average score is then evaluated on a scale from 1 to 4 where 1 indicates low comfort and 4 indicates high comfort[16].

The SPSS 21.0 program was used to analyse the study data. The Kolmogorov Smirnov test was used to check whether the data was normally distributed. Data was presented using descriptive statistics (number, percentage, mean, standard deviation, median, interquartile range). The Mann Whitney U test, Kruskal Wallis Test and Spearman Correlation Analysis were used to analyse the data. $P < 0.05$ was accepted as statistically significant in all analyses.

Approval from the relevant Scientific Ethics Committee and written permission from the hospital were obtained to carry out the research. In addition, the purpose of the study was explained to the patients before they were enrolled in the study and their written and verbal consents were obtained.

Results

There were 123 participants in the study, aged from 22 to 85 years. The majority were men and had a companion. The sociodemographic characteristics of the patients are listed in Table 1.

In terms of clinical characteristics, 33 (26.9%) of the participants included in the study were diagnosed with a bladder tumour, 101 (82.1%) received information about surgery before the operation, 90 (73.2%) were given general anaesthesia, 64 (52.0%) had open surgery, 122 (99.2%) had planned surgery and 78 (63.4%) had previously undergone surgery.

In terms of post-operative problems, it was determined that 94 (76.4%) of study participants did not experience nausea and/or vomiting, whereas 74 (60.2%) experienced pain after surgery. The majority of participants (107, 87.0%) stated that they started walking after the surgery, and 115 (93.5%) stated that they started to eat. In addition, it was found that 67 (54.5%) of the participants had a urinary catheter at the time of the interview.

Table 2 shows the distributions of the mean scores for overall GCQ and PCQ, and the mean scores for the four dimensions assessed by the GCQ (physical, psychospiritual, environmental and sociocultural). The mean overall GCQ score of the participants was 3.05 (±0.38), indicating that their general comfort was above the moderate level. Of the four GCQ dimensions, the physical was found to have the lowest score (2.75 ±0.37). In addition, it was found that the mean PCQ score of the patients was 4.93 (±0.52).

Table 3 shows the median comfort scores obtained for the two questionnaires in relation to certain participant characteristics and variables. It was determined that

Table 2: General comfort questionnaire and perianaesthesia comfort questionnaire scores

Questionnaire		Mean score (±SD)	Range of scores
GCQ overall score		**3.05 (±0.38)**	**2.00–3.71**
GCQ dimensions	physical	2.75 (±0.37)	1.67–3.42
	psychospiritual	3.42 (±0.45)	2.46–4.00
	environmental	2.93 (±0.61)	1.38–3.92
	sociocultural	3.06 (±0.35)	2.20–4.00
PCQ overall score		**4.93 (±0.52)**	**3.50–5.79**

SD = standard deviation

age (GCQ p = 0.174, PCQ p = 0.601), gender (GCQ p = 0.118, PCQ p = 0.675) and type of surgery (GCQ p = 0.528, PCQ p = 0.254) did not affect comfort levels. However, post-operative pain and catheter presence were found to reduce comfort levels assessed using the GCQ (p = 0.003 and p = 0.001, respectively). Correlation analysis showed that there was a moderate positive correlation between GCQ and PCQ scores (p<0.01, rs=0.572).

Discussion

While surgical procedures are used in diagnosis and treatment to save lives, complications that may develop and other problems inherent in this process can disrupt the comfort of patients[5,17]. During the surgical process, nursing practices play an important role in providing individualised care to meet patients' needs and ultimately increase patient comfort by creating a safe environment that allows patients to relax[4,9].

In the present research, two questionnaires were used to examine the comfort levels of the patients – the GCQ and the PCQ. We found the mean GCQ score was 3.05 (±0.38) and the mean PCQ score was 4.93 (±0.52). The mean GCQ scores obtained in the present research are above the general average reported in the literature. Üstündağ[18] examined the comfort level of patients who underwent coronary artery bypass graft surgery and reported that the mean GCQ score was 3.33 (±0.24), and Ören[2] reported that the mean GCQ score was 2.89 (±0.32). On the other hand, the mean PCQ scores are consistent with the literature. Üstündağ[18] reported that the mean PCQ score was 5.06 (±0.50), while Ören[2] reported that the mean PCQ score was 4.96 (±0.56). Similarly, Yilmaz et al.[4], Sönmez[19] and Gürçayır and Karabulut[20] reported mean PCQ scores of 4.26 (±0.58), 5.17 (±0.5) and 4.93 (±0.66), respectively.

Bakır and Yurt[11] evaluated the post-surgical comfort level of patients in all surgical clinics and reported that the overall comfort of patients in the urology clinic was lower than that of other clinics and lower than the average for all clinics. Furthermore, the score for the physical dimension of comfort in urology patients was lower than the scores for the other three dimensions. The present research, with the study sample consisting solely of urology patients, was consistent with this finding – the physical comfort score was 2.75 (±0.37) which is lower than the scores for the other dimensions.

Physical comfort includes factors that affect physical condition such as relaxation, rest, patient's response to illness and trauma, homeostasis, patient's nutritional status and continuity of bowel function[7,21]. In this context, the low physical dimension scores in urology patients found in both studies indicate that urology surgeries negatively affect patient comfort. Furthermore, painful procedures such as urinary catheters are more frequently performed and may be among the factors that negatively affect patient comfort.

In the present research, no significant difference was found between GCQ and PCQ scores with respect to patient characteristics such as age, gender, education level, chronic disease status and smoking or alcohol use. Other studies in the literature also reported that patient characteristics such as age, education level and chronic illness have no effect on comfort level[1,2,20,22].

Üstündağ[18] found no statistically significant relationship between patient characteristics and PCQ, but a significant difference was found in GCQ scores with respect to gender and education level. In addition, Üstündağ[18] reported that the overall comfort level of male patients was higher, and the overall comfort score

Table 3: Correlation of comfort scores with certain variables (N = 123)

Characteristic/variable		n	General comfort questionnaire scores		Perianaesthesia comfort questionnaire scores	
			Median (IQR)	Statistical test result	Median (IQR)	Statistical test result
Age in years	18–65 (young)	78	3.06 (2.69–3.27)	X^2 = 3.502 p = 0.174	5.02 (4.49–5.42)	X^2 = 1.019 p = 0.601
	66–79 (middle-aged)	39	3.19 (2.98–3.38)		5.04 (4.67–5.25)	
	80–99 (old)	6	3.17 (2.96–3.36)		4.71 (3.84–5.42)	
Gender	men	89	3.19 (2.73–3.33)	z = –1.562 p = 0.118	5.04 (4.50–5.29)	z = –0.419 p = 0.675
	women	34	3.06 (2.79–3.25)		4.94 (4.66–5.42)	
Companion status	yes	117	3.15 (2.74–3.29)	z = –0.341 p = 0.733	5.00 (4.63–5.31)	z = –0.300 p = 0.764
	no	6	3.16 (2.86–3.38)		5.10 (4.52–5.33)	
Received information before the operation	yes	101	3.17 (2.78–3.30)	z = -0.727 p = 0.467	5.04 (4.65–5.29)	z = -0.908 p = 0.364
	no	22	3.06 (2.72–3.27)		4.90 (4.26–5.35)	
Surgery type	laparoscopic	59	3.19 (2.79–3.29)	z = -0.631 p = 0.528	5.00 (4.71–5.42)	z = -1.140 p = 0.254
	open	64	3.11 (2.71–3.31)		5.04 (4.46–5.25)	
Previous surgery	yes	78	3.24 (2.81–3.32)	z = -1.916 p = 0.055	5.04 (4.70–5.29)	z = -0.300 p = 0.765
	no	45	3.06 (2.67–3.26)		5.00 (4.46–5.40)	
Post-operative nausea/ vomiting	yes	29	3.08 (2.69–3.34)	z = -0.003 p = 0.998	5.04 (4.83–5.23)	z = -0.310 p = 0.757
	no	94	3.16 (2.77–3.29)		5.00 (4.49–5.34)	
Post-operative pain	yes	74	3.06 (2.69–3.25)	z = -2.968 **p = 0.003***	5.00 (4.59–5.35)	z = -0.401 p = 0.689
	no	49	3.25 (3.01–3.35)		5.08 (4.58–5.29)	
Post-operative mobilisation	yes	107	3.19 (2.79–3.31)	z = -1.757 p = 0.079	5.04 (4.67–5.38)	z = -1.678 p = 0.093
	no	16	3.01 (2.67–3.22)		4.73 (4.54–5.10)	
Post-operative feeding	yes	115	3.15 (2.75–3.29)	z = -0.005 p = 0.996	5.04 (4.63–5.33)	z = -1.298 p = 0.194
	no	8	3.19 (2.69–3.29)		4.71 (4.29–5.07)	
Presence of urinary catheter	yes	67	3.25 (2.98–3.35)	z = -3.263 **p = 0.001***	5.04 (4.67–5.33)	z = -1.210 p = 0.226
	no	56	3.06 (2.69–3.24)		4.91 (4.47–5.25)	

χ^2 = Kruskal Wallis Test, z = Mann Whitney U test
* Statistically significant result (p < 0.05)

increased as the education level increased. Sönmez[19] reported that the mean PCQ score was significantly higher in men compared to women, while Bakır and Yurt[11] found no significant difference in overall comfort with respect to gender. Bakır and Yurt[11] did, however, find that comfort level decreased with increasing age. With advancing age, physiological functions slow down and certain disorders develop which reduce the tolerance of patients to surgical procedures and resulting changes, this, in turn, may adversely affect patient comfort[23].

Failure to provide information to patients undergoing surgical procedures in line with their individual needs may result in certain problems such as difficulty complying with treatment during and after surgery, increased anxiety, difficulty in controlling pain and deterioration in comfort[18]. Similar studies in the literature report that education and information given before surgery positively affect post-operative comfort levels[4,19,20,22]. In the present research, no significant difference was found in mean GCQ and PCQ scores with respect to receiving pre-operative information and other variables such as type of anaesthesia and type of surgery. Considering the results of other studies in the literature, addressing this information gap about the needs of the patients and providing holistic nursing care will positively affect the post-operative comfort level of patients.

Previous hospitalisation or surgical experience, being aware of the situations that may be encountered during the surgery and memory of bad experiences such as pain and suffering related to previous surgical interventions may negatively affect patient comfort levels[2]. In the present research, however, it was found that history of previous surgery did not affect comfort levels. Similarly, Sönmez[19] and Üstündağ[18] also found no significant difference in comfort levels with respect to history of previous surgery. On the other hand, Şahin and Rızalar[1] reported that past surgical experience had a positive effect on comfort levels, finding that the comfort levels of patients who had previously undergone surgery was higher compared to those who had not.

In the present research, 59 participants (48%) underwent laparoscopic surgery and 64 participants (52%) underwent open surgery. When the comfort scores obtained from both questionnaires were examined, no significant difference was found between the two types of surgery. This is despite a current belief that laparoscopic surgery is more comfortable than open surgery due to its positive effects on factors such as hospital stay and recovery time, pain and early return to nutrition or daily life activities[24,25].

Urinary catheters are used more frequently in urology clinics and cause pain during insertion and removal. Furthermore, infections may develop due to prolonged stay of urinary catheters, and pain and difficulties occur during mobilisation. All these factors negatively affect patient comfort. Of the participants in the present study, 67 (54.5%) had a urinary catheter and these participants had a significantly lower comfort score on the GCQ compared to participants who did not have a urinary catheter ($p = 0.001$).

While pain is an expected finding after surgery, if pain cannot be controlled it can cause many problems, such as tachycardia, immunosuppression and prolonged catabolismic activity, that negatively affect post-operative comfort as well as delaying the healing process[7]. Consistent with studies in the literature[1, 19], the results of the present research showed that pain had a negative effect on comfort level assessed using the GCQ.

In addition to pain, another problem that can negatively affect patient comfort after surgery is nausea and vomiting. Şahin and Rızalar reported that post-operative nausea and vomiting may reduce patient comfort after surgery[1]. In the present research, however, no significant difference was found in patient comfort in the presence of nausea and vomiting.

Lastly, when we examined the correlation between PCQ and GCQ scores, we found that there was a moderate positive correlation between the two questionnaires. As overall comfort level increases, early post-operative comfort level also increases. This is consistent with studies by Ören[2] and Üstündağ[18] that used PCQ and GCQ to assess patient comfort and also reported a positive correlation between the two scales.

Limitations of the research

Since the present research was conducted in the urology clinic of a single university hospital in Izmir, the results represent the participants included in the study and cannot be generalised to the Turkish population. Since the research data were obtained using self-reported data collection tools, the reliability of the data is limited to the information provided by the participants.

Conclusion

Results of this research showed that the overall comfort of the patients was above the moderate level. In addition, it was determined that patient comfort was negatively affected in the presence of pain and urinary catheter. During the surgical process, factors that negatively affect patient comfort should be determined and monitored, and appropriate holistic nursing care should be provided by considering the individual characteristics of the patients. For example, removing the urinary catheter as early as possible improves comfort and is also important for preventing infections. Conducting similar studies in other areas may enhance patient comfort and the quality of care in clinical settings.

Declaration of conflicting interests

The authors have declared no competing interests with respect to the research, authorship and publication of this article.

References

1. Şahin PB, Rızalar S. Ameliyat geçiren hastalarda konfor düzeyi ve etkileyen faktörlerin incelenmesi [Comfort levels and affecting factors of patients undergoing surgery] [Internet]. Sağlık Bilimleri ve Meslekleri Dergisi [Journal of Health Sciences and Professions]. 2018[cited 2021 Mar 28];5(3):404–13. DOI: 10.17681/hsp.395018
2. Ören B. Factors affecting the comfort and anxiety level of patients who underwent thoracic surgery [Internet]. Arch Health Sci Res. 2018[cited 2021 Oct 13];5:324–32. DOI: 10.17681/hsp.409359
3. Üstündağ H, Aslan FE. Perianestezi konfor ölçeğinin türkçeye uyarlaması [The Turkish adaptation of perianesthesia comfort questionnaire] [Internet]. Türkiye Klinikleri Hemşirelik Bilimleri Dergisi [Türkiye Clinics Journal of Nursing Science]. 2010[cited 2018 Dec 19];2(2):94–9. Available from: https://www.turkiyeklinikleri.com/article/tr-perianestezi-konfor-olceginin-turkceye-uyarlamasi-58693.html
4. Yılmaz E, Çeçen D, Toğaç HK, Mutlu S, Kara H, Aslan A. Ameliyat sürecindeki hastaların konfor düzeyleri ve hemşirelik bakımları [Comfort levels and nursing care of patients in the operation process] [Internet]. Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi [Celal Bayar University Health Sciences Institute Journal]. 2018[cited 2021 Mar 04];5(1):3–9. Available from: https://dergipark.org.tr/tr/pub/cbusbed/issue/36337/411274
5. Gul G, Bilgic T, Aydin MA. Evaluation of the effects of preoperative dexamethasone administration on postoperative patient comfort in laparoscopic cholecystectomy [Internet]. Cureus. 2020[cited 2021 Jan 30];12(5):e7968. DOI: 10.7759/cureus.7968
6. Sözen KK. Ameliyat sonrası derlenme ünitesinde görülen erken dönem komplikasyonlarının değerlendirilmesi [Evaluation of early complications in the post-operative recovery unit] [Internet]. Çukurova Anestezi ve Cerrahi Bilimler Dergisi [Journal of Cukurova Anesthesia and Surgical Sciences]. 2020[cited 2021 Mar 03];3(3):212–22. Available from: https://dergipark.org.tr/tr/pub/jocass/issue/56838/833937
7. Zengin N. Comfort theory and the effect of intensive care on patient comfort. J Intensiv Care Nurs. 2010;14(2):61–6.
8. Erdemir F, Çırlak A. Rahatlık Kavramı ve Hemşirelikte Kullanımı [The concept of comfort and Its utilization in nursing] [Internet]. Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi [E-Journal of Dokuz Eylul University Nursing Faculty]. 2013[cited 2019 Jan 06];6(4):224–30. Available from: https://dergipark.org.tr/tr/pub/deuhfed/issue/46812/587033
9. Yücel ŞÇ. Kolcaba'nin konfor kurami [Kolcaba's comfort theory] [Internet]. Ege Üniversitesi Hemşirelik Fakültesi Dergisi [Journal of Ege University Nursing Faculty]. 2011[cited 2021 Jan 06];27(2):79–88. Available from: https://dergipark.org.tr/tr/pub/egehemsire/issue/49359
10. Türk Dil Kurumu (TDK) [Turkish Language Association]. Comfort [Internet]. Ankara: TDK; 2022 [cited 2021 Jan 07]. Available from: www.sozluk.gov.tr.
11. Bakır GK, Yurt S. Cerrahi operasyon geçiren hastaların konfor düzeyinin değerlendirilmesi [Evaluation of the comfort level of the post-surgical patients][Internet]. Sağlık ve Toplum [Health and Society]. 2020[cited 2021 Mar 03];3:158–65. Available from: https://ssyv.org.tr/wp-content/uploads/2020/12/18-Cerrahi-Operasyon-Geciren-Hastalarin-Konfor-Duzeyinin-Degerlendirilmesi.pdf
12. Kolcaba K. Comfort theory and practice: A vision for holistic health care and research. New York: Springer Publishing Company;2003.
13. Boudiab LD, Kolcaba K. Comfort theory: Unraveling the complexities of veterans' health care needs [Internet]. Advances in Nursing Science. 2015[cited 2020 Sep 04];38(4):270–78. DOI: 10.1097/ANS.0000000000000089
14. Ünülü M, Kaya N. The effect of Neiguan point (P6) acupressure with wristband on postoperative nausea, vomiting, and comfort level: A randomized controlled study [Internet]. J Perianesth Nurs. 2018[cited 2022 Mar 30];33(6):915–27. DOI: 10.1016/j.jopan.2017.09.006
15. Kaya M. Determination of preoperative and postoperative quality of life of benign prostatic hyperplasia patients. Master's thesis. Malatya: Inönü University/Institute of Health Sciences; 2014.
16. Kuğuoğlu S, Karabacak Ü. Turkish version of the general comfort questionaire. Florence Nightingale J Nurs. 2008;16(61):16-23.
17. Yavuz van Giersbergen M. Ameliyat öncesi hemşirelik yönetimi [Pre-operative nursing management]. In: Yavuz van Giersbergen M, Kaymakci S, editors. Ameliyathane hemşireliği [Operating room nursing]. İzmir: Türk Cerrahi ve Ameliyathane Hemşireliği Derneği [Turkish Surgery and Operating Room Nursing Association]; 2022, pp 273–95.
18. Üstündağ H. The comfort level of patients who underwent coronary artery bypass graft surgery. PhD thesis. Istanbul: Marmara University Institute of Health Sciences; 2009.
19. Sönmez A. Determining the comfort and anxiety experiences of the patients having been applied with coronary artery bypass graft surgery. Master's thesis. Edirne: Trakya University/Institute of Health Sciences; 2013.
20. Gurcayir D, Karabulut N. The effects of the training provided to patients who are scheduled for hip prosthesis surgery on the level of postoperative comfort and daily activities [Internet]. Int J Caring Sci. 2017[cited 2022 Jan 08];10(1):403–13. Available from: www.internationaljournalofcaringsciences.org/docs/44_karabulut_original_10_1.pdf
21. Derya YA, Pasinlioğlu T. The effect of nursing care based on comfort theory on women's postpartum comfort levels after caesarean sections [Internet]. Int J Nurs Knowl. 2017[cited 2019 Jan 06];28(3):138–44. DOI: 10.1111/2047-3095.12122

22. Güner A, Kumsar AK. Akciğer kanseri nedeniyle ameliyat olan hastalarda konfor düzeyi ve konforu etkileyen faktörler [Comfort level and factor affecting comfort level of patients who had surgery for lung cancer] [Internet]. Online Türk Sağlık Bilimleri Dergisi [Online Turkish Journal of Health Sciences]. 2021[cited 2021 Oct 15];6(2):155–62. DOI: 10.26453/otjhs.763680
23. Aygin D. Yaşlı cerrahisinde bakım [Care in elderly surgery]. In: Aslan FE, editor. Vaka Çalışmalarıyla Cerrahi Bakım [Surgical Care with Case Studies]. Ankara: Academician Medical Bookstore; 2016, pp. 181–247.
24. Ozbas A, Cavdar I. Üriner sistem cerrahisinde bakım [Care in urinary system surgery]. In: Aslan FE, editor. Vaka Çalışmalarıyla Cerrahi Bakım [Surgical Care with Case Studies]. Ankara: Academician Medical Bookstore; 2016, pp. 813–70.
25. Özyürek P. Minimal invaziv cerrahi [Minimally invasive surgery]. In: Yavuz van Giersbergen M, Kaymakci S, editors. Ameliyathane hemşireliği [Operating room nursing]. İzmir: Türk Cerrahi ve Ameliyathane Hemşireliği Derneği [Turkish Surgery and Operating Room Nursing Association]; 2022, pp. 637–55.