Original Article

The factors affecting comfort and the comfort levels of patients hospitalized in the coronary intensive care unit

A descriptive-analytical study

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ABSTRACT

الأهداف: لتحديد مستويات الراحة والعوامل المؤثرة على راحة المرضى المقيمين في وحدة العناية المركزة التاجية (CICU).

المنهجية: أجريت هذه الدراسة الوصفية التحليلية في الفترة ما بين مايو 2023م و مايو 2024م في مستشفى جامعي في تركيا. و تألفت العينة من 275 مريضًا. جمعت البيانات باستخدام «نموذج معلومات المريض» و «استبيان الراحة العامة».

النتائج: أن متوسط درجة الراحة العامة للمريض 2.09±0.23. كانت مستويات GC أعلى لدى الذكور، وأولئك الذين يعيشون بمفردهم، والمتقاعدين، والذين تم إدخالهم إلى المستشفى في العناية المركزة بسبب احتشاء عضلة القلب أو عدم انتظام ضربات القلب، و أولئك الذين تم إدخالهم إلى المستشفى بسبب مرض القلب و الأوعية الدموية لأول مرة (p<0.05). أظهرت نتائج تحليل الانحدار أن سبب الاستشفاء السابق كان مرتبطاً بـGC.

الخلاصة: يتمتع المرضى الذين يرقدون في وحدة العناية المركزة لأمراض القلب التاجية بمستويات راحة عامة معتدلة. ويؤثر دخولهم إلى المستشفى في السابق على مستويات راحتهم العامة. وقد ساءت حالتهم أثناء إقامتهم في وحدة العناية المركزة لأمراض القلب التاجية بسبب القلق والخوف من الموت، كما كان للإجراءات الجراحية المتكررة تأثير سلبي على مستويات الراحة العامة.

Objectives: To determine comfort levels and the factors affecting the comfort of patients hospitalized in the coronary intensive care unit (CICU).

Methods: This descriptive, analytical study was carried out between May 2023 and May 2024 in a university hospital in Manisa, Turkey. The sample consisted of 275 patients. Data were collected using the Patient Information Form and General Comfort (GC) questionnaire.

Results: The mean patient overall comfort score was 2.09±0.23. The GC levels were higher in males, those who lived alone, were retired, were hospitalized in intensive care due to myocardial infarction or dysrhythmia, and those hospitalized due to a cardivascular disease for the first time (p<0.05). Regression analysis results showed that the reason for previous hospitalization was related to GC.

Conclusion: Patients hospitalized in the CICU have modearate general comfort levels. Previous hospitalization affects their GC levels. Their condition during their stay in the CICU worsened due to worry and fear of death, and frequent invasive procedures also had a negative effect on the GC levels.

Keywords: coronary care unit, patient comfort, cardiovascular diseases

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Cardiovascular diseases (CDs) are among the leading causes of death both worldwide and in Turkey.[1] With both having a high prevalence and mortality rate, CD presents a serious threat to the health of patients.[2] Relapse of CD is common and patients with CD may require treatment in coronary intensive care units (CICUs) due to various health problems.[1,2]

Intensive care units (ICUs) are units that provide intensive monitoring and follow-up of patients with life-threatening conditions. They are complex because of the special treatment and care methods used by the multidisciplinary team and the presence of complex medical equipment.[3] There are many factors affecting patients' comfort in this complex environment.[4,5]

Cardiovascular diseases cause significant discomfort in patients.[6] Moreover, patients treated in the CICU for problems related to CD experience distress, sadness,

loneliness, and stress due to being separated from their loved ones when admitted to the unit.[4,5] They may also feel that their life is under threat due to the sudden changes in their daily lives.[5,7] However, it has been reported that creating an environment providing physical, social, and spiritual comfort for patients in the unit shortens the length of hospitalization, has a positive effect on the course of the disease and increases satisfaction.[8,9]

In the comfort theory, comfort is defined as an expected outcome with physical, social psychospiritual, and environmental integrity in terms of aiding the individual by fulfilling their needs, increasing serenity of mind, and coping with problems.[10] This theory has many positive contributions to patients.[6] Kolcaba stated that health-enhancing behaviors such as self-care behaviors are related to the comfort level, and reported that these behaviors reduce the length of hospital stay, have a positive effect on the course of the disease and increase satisfaction.[11] In a previous study, it was stated that patients with a high level of comfort recovered in a shorter time, and it was emphasized that comfort was supportive in strengthening the patients.[12]

Investigating the factors affecting patients' comfort is one of the basic nursing approaches.[6] In a study of patients receiving treatment in a CICU, it was determined that the most important factors affecting patients' comfort were communication with doctors, nurses, and having visitors.[6] Therefore, it is thought that determining the factors that may influence the comfort of patients receiving treatment in the CICU will make a significant contribution to patients' compliance with the treatment and the recovery process. More research is needed to examine the factors affecting the comfort of patients receiving treatment in CICU.

The aim of this study was to evaluatethe comfort of patients hospitalized in the CICU and the factors affecting this comfort.

Methods. This descriptive, analytical study included 275 patients hospitalized in the cardiology clinic of a university hospital in Manisa, Turkey, between May 2023 and May 2024. G*Power 3.1.9.4 was used to assess the minimum sample size necessary for a multiple linear regression analysis. For a multiple linear regression with a medium effect size (f2=0.15), an alpha of 0.05, a power of 0.95, and 10 predictors, the required sample size is 172 participants.[13] According to post-hoc power analysis, for a multiple linear regression with a medium effect size (f2=0.15), an alpha of 0.05, and 7 predictors, power of the study was detected at 99%.

The study inclusion criteria were defined as patients aged ≥18 years, who agreed to participate, were followed up in the cardiology clinic after staying in the CICU for at least one night and one day, and had no communication problems and no psychological disorder.

To identify the patients eligible to participate in the study, patients who stayed in the CICU and were then followed up in the ward were tracked. After patients left the CICU and were transferred to rooms in the cardiology clinic, the data of patients who met the study inclusion criteria were collected in the patients' rooms using the face-to-face interview technique. Before data collection began, the patients were informed regarding the subject and aim of the study and informed consent was provided. The patients' interviews lasted approximately 30 minutes.

Approval for the study was obtained by the ethics committee of Health Sciences at Manisa Celal Bayar University, Manisa, Turkey (decision no: 20.478.486/1806, dated 12/04/2023) and institutional permission was obtained from the hospital chief physician's office at Hafsa Sultan Hospital, Manisa, Turkey (10.05.2023-E-90026046-540505). The study was carried out in compliance with the Helsinki Declaration.

The patient information form included 20 items and was prepared with reference to the literature to determine demographic data (age, gender, and so on), and features related to the intensive care experience.[5-7]

The general comfort (GC) questionnaire scale was developed by Kolcaba, and consists of 48 positive and negative items, each scored on a 4-point Likert-type scale. The scale has sub-dimensions of physical comfort (PC), environmental comfort (EC), psychospiritual comfort (PSC), and sociocultural comfort (SCC). The total score obtained is in the range of 48-192 points, which is then divided by the number of items to give a value between 1-4. Higher points indicate a higher level of comfort. The Cronbach alpha coefficient of the scale was determined to be 0.85 in the validity, and reliability study and in this study was 0.75.[14]

Statistical analysis. The data were analysed statistically using the Statistical Package for Social Sciences version 27.0 (IBM Corp., Armonk, NY, USA). Conformity of the data to normal distribution was evaluated with the Shapiro-Wilk test. The data showed normal distribution (p=0.089).[14] Quantitative variables

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were presented as mean ± standard deviation (SD), minimum-maximum values, and qualitative variables as number and percentage. Variance homogeneity was determined using the Levene test. If the variances were equally distributed, the difference between 2 groups was assessed using the t-test in independent groups. If the variances were not equally distributed, the Mann-Whitney-U test was used, and the Kruskal-Wallis test was assessed to compare more than 2 groups. If variances showed homogeneous distribution, the Tukey HSD test was used to determine which group caused the difference when there were 3 or more, and if the variances were not equally distributed, using the Kruskal-Wallis test with the Dunn-Bonferroni test was used. Variables determined to be significant in univariate analysis were included in the multivariate regression analysis. A *p*-value of <0.05 was accepted as the level of statistical significance. The content analysis method was applied to the responses given to the open-ended questions in the research.[15]

Results. Evaluation was carried out for 275 patients, comprising 60.7% males and 39.3% females with a mean age of 61.66±14.53 years; 85.5% were married, and 91.6% had a nuclear family structure. The average length of stay in CICU was 2.67±2.25 days, with heart failure as the most common reason (25.5%) for admission (Table 1).

The GC scale mean score was found to be 2.09±0.23, with sub-dimension scores of 2.15±0.33 for PC, 2.27±0.29 for EC, 1.90±0.24 for PSC, and 1.84±0.36 for SCC. The GC levels were determined to be higher in males, those who lived alone, were retired, were hospitalized in CICU due to myocardial infarction or dysrhythmia, and those hospitalized due to a CD for the first time. The PC levels of males, those with equal income-expenditure levels, those employed in any job, and those who had not been hospitalized due to a CD before were found to be higher. The EC levels of patients living alone, and those who had not been hospitalized due to a CD before were found to be higher. The PSC levels of males, and retired/employed patients were found to be higher. The SCC level was higher in patients who were male, retired/working, were in CICU because of myocardial infarction or dysrhythmia, and who evaluated the communication with the nurses as "very good" (Tables 2 & 3).

In the regression model, the reason for previous hospitalization was found to explain 10.9% of the variance for the GC level, and 4.2% of the variance for EC level. Approximately 3.6% of the variance for PC level was explained by occupational status. The

Table 1 - Demographic characteristics of the patients (N=275).

Variables	n (%)
Age (years), mean±SD (min-max)	61.66±14.53 (21-93)
Length of stay in CICU (days), mean±SD (min-max)	3.37±2.99 (1-12)
Gender	
Female	108 (39.3)
Male	167 (60.7)
Marital status	
Single	40 (14.5)
Married	235 (85.5)
Family structure	
Alone	14 (3.6)
Nuclear family	251 (91.6)
Extended family	10 (4.7)
Education status	
Illiterate	11 (4.0)
Literate	22 (8.0)
Primary school	103 (37.5)
High school	113 (41.1)
University	26 (9.5)
Place of residence	
Village	59 (21.5)
Rural	98 (35.6)
Urban	118 (42.9)
Perceived income status	
Income-expenses equal	252 (91.6)
Expenses exceed income	23 (8.4)
Primary reason for treatment in the CICU	
Myocardial infarction	65 (23.6)
Angiography	58 (21.1)
Heart failure	70 (25.5)
Dysrhythmia	27 (9.8)
Surgical procedures*	31 (11.3)
Other†	24 (8.7)
Previous hospitalization	
None	99 (36.0)
Once	100 (36.4)
2-3 times	22/23 (16.4)
4-5 times	13/18 (11.3)
The reason for previous hospitalization (n=176)	
Related to CD	143 (81.3)
Not related to CD	33 (18.7)
Previous treatment in ICU	
No	150 (54.5)
Once	85 (30.9)
≥2 times‡	40 (14.6)
The reason for previous treatment in the ICU (n=125)	
Related to CD	106 (84.8)
Not related to CD	19 (15.2)
Positive effect of having visitors	
Yes	259 (94.2)
No	16 (5.8)
Communication with nurses	
Good	73 (26.6)
Very good	202 (73.4)

Values are presented as numbers and percentages (%). *Ablation (n=20); pacemaker (n=6); and by-pass (n=3). †Pericardial effusion (n=4); pseudo aneurysm (n=1); peripheral artery disease (n=3); aortic stenosis (n=1); heart valve disease (n=3); cardiomyopathies (n=3); hypertension (n=8); and post-op infection (n=1).‡Second (n=16); third (n=9); fourth (n=6); and fifth (n=9).
CICU: coronary intensive care unit, CD: cardiovascular disease, ICU: intensive care unit, SD: standard deviation, min: minimum, max: maximum

Table 2 - The comfort levels of patients according to demographic characteristics (N=275).

Variables	GC	PC	EC	PSC	SCC
Gender					
Female (n=108)	2.05±0.19	2.10±0.29	2.28±0.27	1.86±0.21	1.77±0.32
Male (n=167)	2.11±0.25	2.18±0.35	2.27±0.30	1.93±0.25	1.89±0.39
Significance	t= -2.248/*p*=0.025	t= -2.129/*p*=0.034	t=0.300/*p*=0.765	t= -2.578/*p*=0.010	t= -2.727/*p*=0.007
Family structure					
Alone (n=14)	2.19±0.22[a]	2.16±0.29	2.50±0.25[a]	1.93±0.19	1.93±0.35
Nuclear family (n=251)	2.09±0.23[b]	2.15±0.38	2.27±0.28[b]	1.91±0.24	1.85±0.37
Extended family (n=10)	1.89±0.19[c]	2.08±0.25	2.05±0.34[c]	1.75±0.24	1.60±0.24
Significance	KW=9.613/ *p*=0.008/a=b>c[*]	KW=0.8584/ *p*=0.651	KW=11.985/*p*<0.002/ a>b, b=c, b=a[*]	KW=4.528/*p*=0.104	KW=5.864/*p*=0.053
Perceived income status					
Income-expenses equal (n=252)	2.10±0.23	2.16±0.34	2.27±0.28	1.91±0.24	1.87±0.36
Expenses exceed income (n=23)	2.00±0.20	2.07±0.26	2.28±0.35	1.82±0.24	1.60±0.27
Significance	u=2198.000/ *p*=0.055	u=2352.500/ *p*=0.134	u=2198.000/*p*=0.055	u=2243.000/*p*=0.071	u=1631.500/*p*<0.001
Occupational status					
Working (n=94)	2.09±0.21[a]	2.14±0.36[a]	2.23±0.27	1.93±0.22[a]	1.86±0.38[a]
Not working (n=86)	2.04±0.21[b]	2.08±0.29[b]	2.29±0.26	1.85±0.22[b]	1.76±0.34[b]
Retired (n=95)	2.13±0.24[c]	2.22±0.32[c]	2.29±0.32	1.93±0.25[c]	1.90±0.36[c]
Significance	F=3.138/*p*=0.045/ c>a=b[†]	F=3.890*p*=0.022/ c>a=b[†]	F=1.188/*p*=0.306	F=3.269/*p*=0.040/ a=c>b[†]	F=3.292/*p*=0.039/ c>a=b[†]

Values are presented as means ± standard deviations (SDs). [*]Dunn-Bonferroni test, [†]Tukey test. Significance at *p*<0.0083. GC: general comfort, PC: physical comfort, EC: environmental comfort, PSC: psychospiritual comfort, SCC: sociocultural comfort, t: independent t-test, u: Mann-Whitney-U test, F: one-way analysis of variance test, r: Pearson correlation test

Table 3 - The comfort levels of patients according to features related to the intensive care experiences (N=275).

Variables	GC	PC	EC	PSC	SCC
Primary reason for treatment in ICU					
Myocardial infarction (n=65)	2.14±0.22[a]	2.23±0.30	2.30±0.35	1.93±0.41	1.95±0.39[a]
Angiography (n=58)	2.05±0.23[b]	2.09±0.35	2.20±0.27	1.90±0.23	1.82±0.34[b]
Heart failure (n=70)	2.09±0.24[c]	2.13±0.31	2.31±0.32	1.92±0.27	1.83±0.38[c]
Dysrhythmia (n=27)	2.13±0.21[d]	2.24±0.28	2.35±0.28	1.86±0.22	1.93±0.29[d]
Surgical procedures(n=31)	2.02±0.22[e]	2.05±0.37	2.23±0.33	1.88±0.16	1.70±0.37[e]
Other (n=24)	2.03±0.26[f]	2.12±0.38	2.23±0.34	1.44±0.24	1.76±0.36[f]
Significance	KW=12.133/*p*=0.033/ a=d>e=f, b=c=e=f[*]	KW=10.940/ *p*=0.053	KW=9.854/ *p*=0.079	KW=5.197/ *p*=0.392	KW=14.193/*p*=0.014/ a=d>e=f, b=c[*]
The reason for previous hospitalization (n=176)					
Related to CD (n=143)	2.07±0.24	2.12±0.34	2.27±0.30	1.89±0.37	1.81±0.37
Not related to CD (n=33)	2.20±0.20	2.28±0.27	2.42±0.25	1.97±0.28	1.96±0.32
Significance	t= -2.924/*p*=0.004	t= -2.622/*p*=0.010	t= -2.558/ *p*=0.011	t= -1.647/ *p*=0.101	t= -2.256/*p*=0.028
Communication with nurses					
Good (n=73)	2.06±0.25	2.10±0.33	2.26±0.32	1.89±0.29	1.77±0.35
Very good (n=202)	2.10±0.22	2.16±0.33	2.27±0.27	1.91±0.22	1.87±0.37
Significance	t= -1.397/*p*=0.163	t= -1.384/*p*=0.167	t= -0.263/ *p*=0.792	t= -0.360/ *p*=0.720	t= -2.104/*p*=0.036

Values are presented as means ± standard deviations (SDs). [*]Dunn-Bonferroni test. Significance at *p*<0.00167. GC: general comfort, PC: physical comfort, EC: environmental comfort, PSC: psychospiritual comfort, SCC: sociocultural comfort, t: independent t-test

primary reason for treatment in the CICU, gender and communication with nurses explained 15.4% of the variance for SCC level (Table 4).

Acccording to the results of the content analysis, the patients stated that they experienced anxiety and worry due to not being able to telephone and give information to the family regarding their situation (n=3), not being able to understand the consent documents in the hospital (n=1), not being able to understand the medical terms that healthcare personnel used when talking to

Table 4 - Variables predicting patient comfort levels.

Variables	General comfort					Physical comfort					Environmental comfort					Sociocultural comfort				
	B	SE	β	t/*p*	VIF	B	SE	β	t/*p*	VIF	B	SE	β	t/*p*	VIF	B	SE	β	t/*p*	VIF
Models	R=0.330, R^2=0.109, F=4.161, *p*=0.001, Durbin-Watson=1.931					R=0.189, R^2=0.036, F=3.365, *p*=0.019, Durbin-Watson=1.900					R=0.206, R^2=0.042, F=3.835, *p*=0.023, Durbin-Watson=1.834					R=0.392, R^2=0.154, F=5.109, *p*<0.001, Durbin-Watson=2.261				
Constant	1.860	0.090	-	18.858/ <0.001		2.067	0.081	-	25.549/ <0.001	-	2.073	0.088	-	23.454/ <0.001	-	1.060	0.314	-	3.376/ <0.01	-
Gender	0.019	0.052	0.041	0.371/ 0.711	2.306	-0.002	0.056	-0.03	-0.0360/ 0.971	1.927	-	-	-	-	-	0.179	0.066	0.242	2.712/ 0.07*	1.590
Family structure	0.026	0.035	0.056	0.747/ 0.456	1.065	-	-	-	-	-	0.046	0.043	0.079	1.060/ 0.291	1.002	-	-	-	-	
Occupational status	0.052	0.029	0.195	1.794/ 0.075	2.257	0.069	0.034	0.168	2.042/ 0.042*	1.903	-	-	-	-	-	-0.012	0.021	-0.048	-0.552/ 0.582	1.107
Perceived income status	-	-	-	-	-						-	-	-	-	-	-0.091	0.047	-0.145	-1.942/ 0.054	1.500
Primary reason for treatment in CICU	-0.021	0.011	-0.142	-1.900/ 0.059	1.060	-	-	-	-	-	-	-	-	-	-	-0.039	0.017	-0.167	-2.273/ 0.024*	1.081
Communication with nurses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.139	0.056	0.176	2.460/ 0.015*	1.018
The reason for previous hospitalization	0.105	0.045	0.175	2.358/ 0.020*	1.055	-0.019	0.013	-0.092	-1.518/ 0.130	1.024	0.146	0.056	0.194	2.606/ 0.010*	1.002	0.076	0.068	0.082	1.119/ 0.265	1.083

*Significance at *p*<0.05. CICU: coronary intensive care unit

them (n=1), not being able to understand the disease and what the treatment would be (n=5), not being able to see their relatives (n=5), worsening of their condition (n=9), prolonged stay in intensive care (n=2), and prejudices regarding intensive care (n=1). During their stay in the ICU, patients experienced fear of death (n=42), fear of invasive procedures (n=9), loneliness (n=3), fear of being intubated again (n=1), and boredom (n=1). Situations that they thought negatively affected their comfort in the ICU were stated to be frequent invasive procedures (n=4), lack of a companion (n=2), thirst (n=2), pain (n=2), feeling palpitations (n=1), difficulty in breathing (n=1), being dependent on mechanical ventilation (n=1), and having shared male and female patient toilets (n=1).

Discussion. Comfort is a complex concept, with different meanings for different people according to their experiences.[16] Numerous factors influence the comfort level.[6] In this study carried out with patients in CICU, the GC scale score was found to be 2.09±0.23, with sub-dimension scores of 2.15±0.33 for PC, 2.27±0.29 for EC, 1.90±0.24 for PSC, and 1.84±0.36 for SCC. The overall comfort level was evaluated as moderate, with the highest score for PCC, and the lowest score for SCC.[17] The GC scale scores of patients have been reported in literature in the range of 2.6±0.40 to 3.22±0.33.6.[16,18,19] Accordingly, the current study sample was seen to have a lower comfort level, which could be attributed to the different characteristics of sample groups in different studies. According to these results, it can be said that the comfort level of patients with CD is insufficient.

The GC levels were seen to be higher in males in this study. Similarly, it was found that the male patient comfort level was higher than that of females in a previous study of patients undergoing coronary artery bypass graft surgery.[20] Another study carried out with patients in surgical clinics, also found a higher comfort level in males than females.[21] In contrast, Nural et al[6] found no significant difference between the genders relating to the comfort scores of patients in CICU. The lower comfort level of females in the current study may be related to the higher PC, EC, and SCC of males. Sahin et al[21] suggested that the female lower comfort level was affected by their responsibilities to home and children. Loneliness is a risk factor for CDs, which also negatively affects the social and general health of patients.[22,23] Therefore, the comfort of patients who live alone can also be negatively affected. An interesting finding of this study was that the GC levels were higher in patients living alone, and the difference between the groups was observed to be due to the lower comfort scores of patients living in extended families ($p<0.05$). Unlike these results, Nural et al[6] found that patients living in a large family environment had higher comfort scores, although the difference was not significant. In another study of coronary artery bypass patients, those living with a spouse or children were found to have higher comfort scores than patients living alone, although the scores did not differ significantly.[20] In Turkey, older people living with extended family generally live in the children's home. Leaving one's own comfort zone and going to another home may have a negative impact on the comfort of older people and they

may see themselves as a burden on others. This may have caused the GC to decrease.

Interestingly, the GC levels in this study were higher in retired patients than in those working. In contrast, Ustundag et al[20] stated that there was no significant relationship between patients' comfort level and working status, and this was also confirmed by Dolu et al.[24] These findings could be explained by the fact that retired people have more time to understand a sense of meaning of themselves and the illness. It could also be due to children having established their own lives so there is no responsibility to care for them, there is no stress related to the workplace and employers, and no concern regarding losing a job.

As expected, the GC levels in this study were higher in patients in CICU due to myocardial infarction/dysrhythmia, rather than illness following surgical procedures and heart failure. Surgical interventions are life-saving procedures, but they are also psychologically and socially traumatic for the patient.[25] The patient is faced with many physical and psychosocial problems during the surgical procedure, all of which cause the patient's comfort to deteriorate.[25,26] In addition, the comfort of heart failure patients may be lower because of difficulties experienced in daily living activities.[27]

The GC levels in this study were higher in patients who had not been previously hospitalized because of CD. A previous study, reported that the previous hospital experiences of patients undergoing surgery negatively affected patient comfort.[28] However, in another study, no significant effect was determined.[18] Similarly, Sahin et al[21] stated that previous hospital experience has a positive effect on patients' comfort. In the current study, it was thought that the comfort level of the patients hospitalized due to CD may have been positively affected because they had previously experienced the hospital environment, had some knowledge regarding the treatment of the disease, and had experienced the comfort requirements during the hospitalization process.

The reason for previous hospitalization was found to be significant in the created regression models for GC, and EC. In contrast, in a study of patients hospitalized in a CICU, it was determined that ageing and a higher level of education had a negative effect on GC, while the level of communication with physicians, and having visitors positively affected patient comfort.[6] In the current study, it was expected that ageing and gender would explain comfort. Younger people would normally be expected to have a higher comfort level.[6,10] Therefore, these results are crucial to be able to determine the variables affecting patients' comfort in CICU. It can be recommended that further studies are carried out on the variables that affect patients and especially the differences between age groups in CICU.

In the current study, 15.4% of the variance for SCC level was explained by the primary reason for treatment in the CICU (gender and communication with nurses). Similarly, a significantly higher level of comfort has been reported in patients who indicated that nurses and physicians had very good communication with them.[6] Therefore, these results are of great importance in respect of demonstrating the effect of health professionals' communication on patients' comfort in CICUs in Turkey.

Patients stated that they experienced anxiety and worry as they were not able to telephone and inform their relatives regarding their situation, not able to understand the consent documents in the hospital, and could not understand the medical terms that healthcare personnel used when speaking to them. It has been previously reported that people surviving critical illness experience anxiety and worry after intensive care discharge as they had thought they would die.[29] Therefore, these results were expected.

During their stay in the ICU, patients experienced fear of death and invasive procedures, loneliness, fear of being intubated again, and boredom. Berntzen et al[30] found similar results in their research.

Patients stated that the situations that they thought negatively affected their comfort in CICU were frequent invasive procedures, lack of a companion, thirst, and pain, and so on. Topcu et al[31] reported similar situations that negatively affected the comfort of patients.

Study limitations. The primary limitation of this study was that not all patients were included as participation was on a voluntary basis. Another limitation was that different treatment approaches can affect patients' comfort. Furthermore, the results cannot be generalized to all patients in CICU because the sample only included patients from one hospital, and finally, the results were based on individual reports. However, the data collection tools were useful in evaluating patients' comfort.

In conclusion, the results of this study indicated a moderate level of comfort in the patients treated in the CICU. The reason for previous hospitalization was a significant variable affecting GC, PC, and EC, whereas the primary reason for the treatment in CICU and communication with nurses were significant for SCC. Furthermore, patients stated that they always experienced anxiety, worry, and fear of death during their stay in the CICU, and thought their comfort was negatively affected by frequent invasive procedures,

lack of a companion, thirst, and pain. These findings indicate that approaches can be implemented to improve patients' comfort. Therefore, there is a need for further studies to detect the variables that may affect patients' comfort. Potential approaches are critically important for patients' health. Moreover, comprehensive qualitative studies could be carried out to explain the factors affecting patients' comfort.

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