

Care Behaviors of Nursing Students and the Influencing Factors: A Comparative Study

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Abstract

Aim: This study was conducted to determine the care behavior perceptions of Turkish and foreign students who were continuing their education in Turkey and the Turkish Republic of Northern Cyprus as well as the influencing factors and if there was a difference between their care behavior perceptions.

Method: The sample of the descriptive and correlational study was composed of the nursing students of a Foundation University in Istanbul and a university in the Turkish Republic of Northern Cyprus (TRNC). 651 students who agreed to participate in the study were included in the study. The data were collected with Student Information Form and Care Behaviors Inventory-24 (CBI-24). Frequency, mean, standard deviation, Kolmogorov-Smirnov test, Shapiro Wilk-W test, Mann-Whitney U test, and Kruskal-Wallis test were used to analyze the data.

Results: It was determined that the mean age of the students was $21,30 \pm 2,92$. CBI-24 mean scores of the students were $5,22 \pm 0,70$. CBI-24 mean score of the students who were willing chose the nursing profession, stated that caregiving is the main task of the nurse, and had the experience of giving and receiving the care was found to be higher ($p < 0,05$).

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ETHICAL STATEMENT: In order to conduct the study, approval (YDU/2018/62-650, 02/02/2019 dated and 2019/04 numbered / and 21/01/2020-E.385 dated and 20292139-050.01.04 numbered) was obtained from the Ethics Committees of both universities. Before the application, the participants were informed about the study and their verbal and written consents were obtained.

Conclusion: It was determined that the care behaviors perceptions of the students were in a good level and the care behaviors perceptions of the students were affected by the factors like gender, grade, nationality, preferring the profession willingly, feeling sufficient about understanding patients and choosing the nursing profession again if they had another chance. In line with these results, it is recommended to ensure that students willingly prefer the profession and to carry out practices to ensure the continuity of positive care behaviors of students during the nursing education.

Keywords: Care behaviors, nursing students, nursing care.

Hemşirelik Öğrencilerinin Bakım Davranışları ve Etkileyen Faktörler: Karşılaştırmalı Bir Çalışma

Öz

Amaç: Bu çalışma ile Türkiye ve Kuzey Kıbrıs Türk Cumhuriyeti'nde öğrenimine devam eden Türk ve yabancı uyruklu öğrencilerin bakım davranışı algılarını, etkileyen faktörleri ve öğrenciler arasında bakım davranışı algılarında fark olup olmadığını belirlemek amacıyla gerçekleştirildi.

Yöntem: Tanımlayıcı ve ilişki arayıcı tipte yapılan araştırmanın örneklemini İstanbul'da bir Vakıf Üniversitesi ile Kuzey Kıbrıs Türk Cumhuriyeti (KKTC)'deki bir üniversitenin hemşirelik öğrencileri oluşturmuştur. Çalışmaya katılmayı kabul eden 651 öğrenci araştırmaya dahil edilmiştir. Veriler Öğrenci Tanıtım Formu ve Bakım Davranışları Ölçeği-24 (BDÖ-24) ile toplanmıştır. Verilerin analizinde frekans, ortalama, standart sapma, Kolmogorov-Smirnov, Shapiro Wilk-W testi, Mann-Whitney U ve Kruskal-Wallis testi kullanılmıştır.

Bulgular: Öğrencilerin yaş ortalaması $21,30 \pm 2,92$ 'dir. Öğrencilerin BDÖ-24 ortalama puanı $5,22 \pm 0,70$ 'dir. Hemşirelik mesleğini isteyerek seçen, bakım vermenin hemşirenin temel görevi olduğunu belirten, bakım verme ve bakım alma deneyimi olan öğrencilerin BDÖ-24 ortalama puanının daha yüksek olduğu bulunmuştur ($p < 0.05$).

Sonuç: Öğrencilerin bakım davranışları algılamalarının iyi düzeyde olduğu; öğrencilerin bakım davranışları algılamalarını cinsiyet, sınıf, uyruk, mesleği isteyerek tercih etme, hastaları anlama konusunda kendilerini yeterli hissetme ve başka seçeneğini olsa yine de hemşirelik mesleğini seçme gibi faktörlerin etkilediği belirlenmiştir. Bu sonuçlar doğrultusunda; öğrencilerin mesleği isteyerek tercih etmelerinin sağlanması; hemşirelik eğitimi süresince öğrencilerin olumlu bakım davranışlarının sürekliliğinin sağlanmasına yönelik uygulamaların yapılması önerilmektedir.

Anahtar Kelimeler: Bakım davranışları, hemşirelik öğrencileri, hemşirelik bakımı.

Introduction

Care is a multidimensional phenomenon that begins with the history of humanity, has been defined in various forms but has no single definition. It is a concept that is not specific only for nursing but unique for nursing and an occupation made by nurses^{1,2}. Nursing care is generally based on the communication between the healthy/sick individual and the nurse and includes relieving the individual with a holistic approach, helping him/her to find peace, and meeting basic human needs^{1,3}. In addition to this definition, many theorists defined the care concept with different perspectives. For example, it was defined to cover “delivery of beneficial service, a moral behavior and ethical obligation” by Fry, “ensuring education and learning activities of the care of an individual” by Hall, “meeting the needs of an individual when he/she cannot meet his/her own self-care needs” by Orem, “helping and supporting in meeting the requirements of a group whose needs were determined and having the professional knowledge, skills and behaviors to do so” by Leininger⁴. Leininger also expresses that as a teaching forming the basis of nursing practices, care is at the center of nursing that is a profession containing a value-belief system⁵. Henderson emphasizes that the physical, psychological, cultural, intellectual and social aspects of the patients should be considered by the nurse while realizing care action and states that the nurse should have the values of helping and empathizing⁶. In this context, when the concept of nursing care and characteristics are examined, it is seen that the concept includes physical, psychological, social and spiritual interventions of the person. Therefore, it is very difficult to define the concept^{1,7}. Nursing care, which contains a basic foundation and originality for nurses and has many dimensions, is affected by professional and individual characteristics of nurses as well as many social, political, economic and institutional factors. On the other hand, understanding the scope of the nursing care concept constituting the essence of nursing is very important in terms of comprehending nursing, understanding its philosophy and abandoning the practices that are not included in the care concept.

Developments in technology and social changes from past to present have caused nurse roles to change and differentiate. This made it necessary for nurses to make more complex decisions in the care process. Therefore, the nurse must have sufficient professional knowledge and skill, follow scientific and medical developments, be open to

change, take responsibility and adopt professional ethical values. Therefore, it becomes important to teach theoretical and clinical practices with care and care-related attitudes and behaviors within nursing education programs. Basset stated that the knowledge and experiences gained by nursing students during their education process have a crucial effect on taking responsibility and adapting their roles about nursing care and practices⁸. In their study, Murphy et al investigated “the effect of nursing education on care behaviors of nursing students”, and determined that third-year students had lower care behavior scores compared to the first-year students and the education process decreased their care behaviors⁹. In another study, care behaviors of the third-year students were better than those of the first-year students¹⁰. Care is a basic nursing value and a desirable feature in nursing students. Therefore, professional education should be established on the basis of care. The aim of this study was to determine the care behavior perceptions of Turkish and foreign students continuing their education in Turkey and the Turkish Republic of Northern Cyprus as well as the influencing factors and whether or not there is a difference between the students in their care behavior perceptions.

In this study, the answers to the following questions were sought:

- 1- What are the nursing students' perceptions of care behavior?
- 2- What are the factors affecting nursing students' perceptions of care behavior?
- 3- Is there a difference between Turkish and foreign students' perceptions of care behavior?

Material Methods

Place of the Study

The descriptive study was conducted with the students of the nursing undergraduate program of two universities (Istanbul/Turkey, Nicosia/TRNC) between October 2018 and June 2019.

Participants and Procedures

The target population of the study was composed of nursing students studying in the Nursing departments of both universities (n=1100). In the study, no sampling method was used and 651 students, who agreed to participate in the study, completed at least one

half-year clinical practice and attended classes on the days when the data were collected, were included in the study. The questionnaire was applied to each class on different days and during the times other than students' classes. Before the application of the questionnaire, the students were informed. The questionnaire was delivered to the students who agreed to participate in the study and they were asked to fill out it under the supervision of the researchers. The application of the questionnaire took an average of 15 minutes.

Ethical Considerations

In order to conduct the study, approval (YDU/2018/62-650, 02/02/2019 dated and 2019/04 numbered / and 21/01/2020-E.385 dated and 20292139-050.01.04 numbered) was obtained from the Ethics Committees of both universities. Before the application, the participants were informed about the study and their verbal and written consents were obtained.

Data Collection Tools

Student Information Form; Student Information Form is composed of thirteen questions (age, gender, class level, family type, hospitalization status, working experience as a nurse, status of taking care of an elderly/a baby or a patient, status of feeling self-competent in understanding patients, and status of selecting the profession willingly, etc.).

Care Behaviors Inventory-24 (CBI-24); This scale prepared by Wu et al.¹¹ is the short form of "Care Behaviors Inventory-42 (Caring Behaviors Inventory-42)" containing 42 items suitable for bidirectional diagnosis by patients and nurses developed by Wolf et al.¹¹. Turkish reliability studies of the scale designed to evaluate the nursing care process were conducted by Kurşun and Kanan¹².

The inventory was designed to evaluate the nursing care process. CBI-24 is used to compare the nurses' self-assessment and their patient perceptions¹¹. In addition, the inventory is also used to evaluate nursing care (resting, training, care behaviors covering also the patient in decision making) given in the pre-and post-surgical intervention period.

Care Behaviors Inventory is composed of 24 items and 4 subscales including assurance (8 items=16,17,18,20,21,22,23,24), knowledge-skill (5 items=9,10,11,12,15), respect (6 items=1,3,5,6,13,19), and adherence (5 items=2,4,7,8,14). 6-point Likert-type scale (1=never, 2=almost never, 3=sometimes, 4=usually, 5=often, 6=always) is used for the answers. The scale total score between 1-6 is obtained by summing all item scores (24 items) and dividing them into 24. For each subscale, subscale scores between 1-6 are obtained by dividing the score, obtained by summing the scores of the items in the subscale, into the number of items. As the subscale and total scale scores increase, the level of perception of the quality of care of patients or nurses increases¹².

The scale is filled out by the patient and the researcher (individual or phone interview) or by the patient him/herself. The internal consistency of the scale for both patients and nurses is 0,96 on the overall scale and ranges between 0,82 and 0,92 in its subscales¹¹. It was determined in the present study that Cronbach's alpha value was 0,91 for the overall scale and ranged between 0,88 and 0,92 for its subscales.

Evaluation of the Data

In the data assessment, IBM SPSS 25.0 (SPSS Inc., Chicago, IL, USA) packaged software was used. Firstly, Kolmogorov-Smirnov and Shapiro Wilk-W tests were performed in order to determine whether or not data showed normal distribution and normal distribution of data was examined. It was determined that the significance level of the obtained results was $p < 0.05$ and the data were not normally distributed. In the literature, if it is $p < 0.05$, this indicates that the data do not show normal distribution¹³. According to these results, nonparametric tests were applied. In the comparison of quantitative data, Mann-Whitney U test between two independent groups where the data were numerical, Kruskal-Wallis test between more than two independent groups where data were numerical and frequency, mean, and standard deviation values for descriptive statistics were used. In order to determine the cause of the difference, a post-hoc analysis was conducted. The results were evaluated at a confidence interval of 95% and significance level of $p < 0.05$.

Results

It was determined as a result of the analysis of the data, the mean age of the participants was 21 ± 2 , 57,5% were Turkish, 35% were third-year students, 73% were female, 97,4%

were single, 96,9% had no children, 71,9% had no siblings, 74% were living in a nuclear family and 52,8% had never been hospitalized. It was determined that 84,8% of the students had no working experience as a nurse, 56,4% had taken care of an elderly/baby/patient before, and 52,8% sometimes felt competent to understand the patients. It was also determined that 84% of the students chose to be a student nurse by their own willingness, and 66,4% responded “yes” to the question “would they choose the nursing profession again if they had another chance” (Table 1).

Table 1. Descriptive characteristics of the students (n=651)

Descriptive Characteristics		Number	%
Nationality	Turk	374	57.5
	Turkish Cypriot	101	15.5
	Foreign National	176	27.0
Education	1 st year	123	18.9
	2 nd year	160	24.6
	3 rd year	228	35.0
	4 th year	140	21.5
Gender	Female	475	73.0
	Male	176	27.0
Marital status	Married	17	2.6
	Single	634	97.4
Status of having children	Yes	20	3.1
	No	631	96.9
Status of having siblings	Yes	611	93.9
	No	40	6.1
Family	Nuclear	482	74.0
	Extended	119	18.3
	Single parent	42	6.5
	Broken family	6	.9
	I live alone	2	.3
Previous hospitalization	Yes	307	47.2
	No	344	52.8
Status of having experience as a nurse	Yes	99	15.3
	No	552	84.8
Year of experience as a nurse for those who said yes	<6 months	45	6.9
	>1 year	28	4.3
	>3 years	13	2
	>5 years	1	.2

	Unspecified	12	1.8
Status of taking care of a baby/elderly or a patient before	Yes	367	56.4
	No	284	43.6
Status of feeling competent about understanding patients	Always	297	45.6
	Sometimes	344	52.8
	Never	10	1.5
Status of choosing to be a student nurse by their own willingness	Yes	548	84.2
	No	103	15.8
Status of selecting nursing profession again if he/she had another chance	Yes	432	66.4
	No	219	33.7
	Total	651	100
Mean Age (Mean ± Sd)		21± 2	

When the mean score of the subscales of the scale was examined, it was found to be $5,33 \pm 0,794$ for assurance subscale, $5,15 \pm 0,946$ for knowledge and skill subscale, $5,27 \pm 0,747$ for respect subscale, $5,08 \pm 0,876$ for adherence subscale and care behaviors inventory total mean score was $5,22 \pm 0,702$ (Table 2).

Table 2. Care Behaviors Inventory mean scores of the students (n=651)

Subscales	Minimum	Maximum	X̄	SD	Cronbach's Alpha
Assurance	1.13	13.13	5.33	.794	.898
Knowledge Skill	1.00	18.00	5.15	.946	.928
Respect	1.00	6.00	5.27	.747	.883
Adherence	1.00	12.80	5.08	.876	.900
Care Behaviors Inventory Total	1.58	8.50	5.22	.702	0.91

X: mean, SD: standard deviation

In order to determine if the Care Behaviors Inventory total score and subscale mean scores of the students included in the study showed a significant difference according to variables of gender, education status, marital status, nationality, the status of having a child and family type, Mann Whitney U Test and Kruskal-Wallis H tests were conducted. As a result of the test, a statistically significant difference ($p < 0.05$) was found in the knowledge and skill subscale according to gender, in the assurance and respect subscales according to educational background and in the adherence subscale according to nationality. Hence, the difference was induced by the male gender, by the mean scores

of the first-year students, and by the highest scores of the Turkish Cypriot students, followed by the scores of Turkish students and the scores of the foreign students were the least. No significant difference was found between the other variables and scale scores ($p>0.05$) (Table 3).

Table 3. Comparison of descriptive characteristics and care behaviors inventory mean scores of the students (n=651)

	Assurance		Knowledge-skill		Respect		Adherence		Scale Total	
Gender	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	S
Female	5.34	.693	5.12	.978	5.30	.687	5.08	.876	5.23	.666
Male	5.27	.822	5.23	.782	5.20	.870	5.06	.874	5.20	.770
U	41.449		46.582		40.204		42.423		42.750	
p	.868		.024		.451		.769		.656	
Nationality	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Turk	5.37	.652	5.15	.982	5.29	.706	5.13	.739	5.25	.647
Turkish Cypriot	5.32	.761	5.09	.901	5.36	.695	5.31	.984	5.28	.677
Foreigner	5.21	.853	5.20	.831	5.18	.832	4.83	1.01	5.12	.792
K-WH	1.770		4.189		2.508		12.598		2.016	
P	.413		.123		.285		.002		.365	
Marital Status	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Married	4.87	1.19	4.86	1.07	4.85	1.096	5.08	.773	4.91	.986
Single	5.33	.715	5.16	.92	5.28	.730	5.07	.878	5.23	.687
U	3.083		.793		4.973		.999		2.087	
P	.214		.673		.083		.607		.352	
Do you have children	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Yes	5.44	.583	5.35	.678	5.42	.790	5.35	.741	5.40	.619
No	5.32	.735	5.15	.937	5.27	.741	5.07	.878	5.22	.697
U	5.531		5.016		4.833		4.549		4.828	
P	.563		.222		.147		.072		.148	

Education Status	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
1st Year	5.43	.715	5.09	.908	5.36	.730	5.14	.762	5.28	.664
2nd Year	5.28	.775	5.09	.770	5.33	.721	5.11	.772	5.22	.681
3rd Year	5.35	.670	5.16	.728	5.27	.739	5.05	.854	5.23	.653
4th Year	5.22	.774	5.26	1.32	5.14	.768	5.03	1.08	5.17	.799
K-WH	8.028		2.398		8.096		2.753		2.007	
P	.045		.494		.044		.571		.045	
Family type	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Nuclear	5.30	.737	5.14	.9799	5.27	.736	5.06	.907	5.21	.704
Extended	5.41	.658	5.21	.771	5.31	.717	5.17	.726	5.29	.629
Single parent	5.24	.860	5.13	.759	5.17	.853	4.91	.854	5.13	.750
Broken family	5.35	.743	5.13	1.100	5.25	1.083	5.23	1.127	5.25	.974
Living alone	5.31	.088	5.60	.282	5.66	.235	5.40	.000	5.47	.029
K-WH	3.732		2.707		1.144	4.040	2.987		3.732	
P	.444		.608		.887	.401	.560		.444	

K-W H: Kruskal-Wallis H Test, U: Mann Whitney U Test

Mann Whitney U and Kruskal-Wallis H tests were applied to determine if the Care Behaviors Inventory total score and subscale mean scores of the students included in the study showed a significant difference according to the variables of “previous hospitalization, the experience of working as a nurse, choosing nursing profession again if they had another chance, taking care of an elderly/baby/patient before, feeling competent about understanding patients, and preferring a student nurse by their own willingness. As a result of the test, a statistically significant difference was found between the scale total score and subscale mean scores and the variables of “preferring nursing profession again, feeling competent about understanding patients, and preferring to be a student nurse by their own willingness” ($p < 0.05$). The difference was found to be caused by the high mean scores of the participants who responded “yes”. No significant difference was found between the other variables and scale scores ($p > 0.05$) (Table 4).

Table 4. Comparison of the students' views on profession and Care Behaviors Inventory mean scores (n=651)

	Assurance		Knowledge-skill		Respect		Adherence		Scale Total	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	S
PH										
Yes	5.44	.583	5.35	.678	5.42	.790	5.35	.741	5.40	.619
No	5.32	.735	5.15	.937	5.27	.741	5.07	.878	5.22	.697
U	5.016		5.079		5.139		5.128		5.037	
P	.300		.438		.603		.571		.344	
SHEAN										
Yes	5.32	.788	5.27	.699	5.19	.854	4.96	.901	5.20	.725
No	5.32	.721	5.13	.965	5.29	.721	5.09	.869	5.22	.690
U	2.654		2.380		2.546		2.480		2.655	
P	.894		.079		.441		.245		.899	
SSNPAIAC										
Yes	5.36	.711	5.20	.800	5.32	.730	5.14	.886	5.27	.674
No	5.24	.765	5.06	1.145	5.17	.759	4.94	.841	5.12	.729
U	41.393		39.329		39.590		40.230		39.198	
P	.014		.001		.001		.003		.001	
STCBEPB										
Yes	5.29	.740	5.15	.786	5.24	.766	5.03	.968	5.19	.702
No	5.36	.717	5.16	1.09	5.32	.708	5.13	.735	5.26	.685
U	4.855		5.090		4.873		4.932		4.912	
P	.132		.608		.153		.239		.209	
SFCAUP										
Always	5.44	.753	5.31	.792	5.42	.761	5.25	.956	5.37	.712
Sometimes	5.23	.677	5.04	1.01	5.15	.699	4.94	.762	5.11	.649
Never	4.82	1.136	4.48	1.084	4.88	.777	4.64	1.042	4.72	.846
K-WH	34.299		40.125		45.198		36.881		53.728	
P	.000		.000		.000		.000		.000	
SCSNBTOW										
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD

Yes	5.36	.679	5.187	.768	5.33	.695	5.14	.846	5.27	.637
No	5.08	.929	5.00	1.52	4.99	.905	4.75	.957	4.97	.909
U	22.774		22.836		20.991		21.331		21.357	
P	.002		.002		.000		.000		.000	

K-W H: Kruskal-Wallis H Test, U: Mann Whitney U Test

* PH; Previous hospitalization, SHEAN; Status of having experience as a nurse, SSNPAIAC; Status of selecting nursing profession again if he/she had another chance, STCBEPB; Status of taking care of a baby/elderly or a patient before, SFCAUP; Status of feeling competent about understanding patients, SCSNBTOU; Status of choosing to be a student nurse by their own willingness.

Discussion

Nursing care is a service that all individuals in society will need in any period of their lives, and it is an important quality indicator of health services. In order to provide quality care which is under the responsibility of nurses, they should have necessary information and skills and care should be sensitive in terms of human and ethical aspects¹⁴. Since nursing students are the potential nurses of the future, they are expected to have appropriate care behaviors in addition to appropriate academic qualifications. While the education process provides a positive change in helping nursing students to gain care behaviors, it is stated that this change is sometimes not positive⁹. Therefore, this study was conducted to determine the care behavior perceptions of nursing students, the influencing factors and whether or not there was a difference between the students' care behavior perceptions.

According to the study results, the CBI-24 total mean score of the students was high (5,22±0,702). This showed that students' perceptions about care were positive. Similarly, it was stated in other studies that student nurses had high care perceptions¹⁴⁻¹⁶. In the present study, high care behavior perception of student nurses showed that care concept was attached importance in education and the students were supported to develop these behaviors. The students also obtained high scores on the subscales of the CBI-24. It was determined that they obtained the highest score from the assurance subscale; whereas, the lowest score was from the adherence subscale. High score of assurance subscale in the study showed that the nurses performed their roles well in the

subjects like going to the patient willingly, meeting their needs, reducing their pain, performing their treatment on time and relieving their symptoms. In the study conducted by Labrague et. al. to investigate care behavior perceptions of 586 nursing students, they stated that the students received the highest score from the assurance subscale¹⁷. Low score obtained from adherence subscale indicated that student nurses can not fully fulfill their important roles and responsibilities about informing, training patient by sparing time for him/her, and ensuring patient's involvement in care planning. When different studies conducted with nurses are examined, it was concluded that "nurses did not fully perform activities such as training, informing that will contribute to the development of the patient by sparing more time for him/her" which is similar to the results of the present study¹⁸⁻²⁰. However, when the different studies conducted with nurses in clinics and student nurses were examined, it was seen that while the highest score was obtained mostly in the knowledge-skill subscale, the lowest score was obtained in the adherence subscale^{14,21,22}. Similar to the present study, it was stated in the study conducted by Turk G. et al. with 673 nursing students that the highest score was observed in the assurance subscale and the lowest scores were observed in knowledge-skill and adherence subscales²³. The fact that the knowledge skill subscale was lower than the assurance and respect subscales may be related with crowded clinical practice areas, fewer hours of clinical practice due to difficulties in admitting students in clinical areas, and less involvement of students in clinical practice due to the malpractice concerns. The high score of assurance subscale showed that the students loved the profession, adopted the patient and cared about the patient. This may also mean that the student nurses were very sensitive about the real and perceived needs and expectations of the patients. In the literature, it is stated that the sense of holistic care is a concept containing affective, cognitive and psychomotor skills and having a moral dimension based on mutual trust^{15,19}. Therefore, high scores of the students from the overall scale and its subscales are a pleasing result showing that they have adopted the care concept.

When the students' descriptive characteristics and CBI-24 mean scores were compared, male students had significantly higher knowledge-skill subscale scores than female students. The effect of gender on care perception has been examined in various studies. Some studies concluded that there was a difference in favor of women^{23,24}, while some other studies revealed that gender did not cause any difference^{14,16}. We can attribute the

higher score of men from knowledge-skill subscale as a result of the present study to the effort of showing that men can also do the nursing profession predominantly done by women as well as women do. When the social perception related to the nursing profession in the past is evaluated, it was accepted as a profession that was considered as appropriate to women mainly because of its caregiving role and today, the number of male students preferring this profession is increasing every year. In addition, the acceptance rate of male nurses in society increases and the sexist approach in the nursing profession also decreases²⁵. The fact that there was no difference in the other subscales of the scale showed that both genders comprehended that the care concept is very important in the nursing profession.

A significant difference was determined in the adherence subscale based on nationality. It was determined that the difference based on nationality was caused by higher scores of Turkish Cypriots than Turkish students and higher scores of Turkish students than foreign students. While Turkish Cypriot students got the highest score in adherence subscale, foreign students received the lowest score. Differences in care behaviors reported by the student nurses are an evidence indicating that the care expression varies by culture. According to the report by Labrague et al.¹⁷, Leininger⁵ stated that care is a universal phenomenon but expressions, processes and patterns differ between cultures¹⁷. In the same study, it was also stated that the students found psychological skills more important than practical behaviors¹⁷. In the study conducted by Omari et al. with 150 patients and 60 nurses in the coronary care unit in Jordan, the nurses reported that they perceived the psychological aspects of care as important care behaviors²⁶.

Khademian and Vizeshfar determined that the students in a nursing program based on a university in Iran perceived physical-based care behaviors as more important but emotional behaviors as less important care behaviors²⁷. Differences in the studies showed that there are differences in students' care behavior perceptions depending on cultures.

Another significant difference in this study was that assurance and respect subscale mean scores of the first-year students were higher. In another study investigating the effect of nursing education on care behaviors of nursing students, the scores of third-year students were found to be lower than the first-year student⁹. However, in the study by

Turk et al. the scores of fourth-year students were found to be higher unlike the results of the present study²³. The fact that the students get lower scores from this subscale as the year increases should be carefully monitored by nurse educators and clinical managers. As the education period increases and the time spent with the patient in the clinic prolongs, the presence of the difference in knowledge-skill subscale is a natural result of the education activity. In fact, it was stated in a study examining the nursing students' understanding of care science that the students deepened in understanding care science in the last year of their education²⁸.

In the comparison made between the nursing students' responses to the questions about the profession other than their descriptive characteristics and overall CBI-24 scale and its subscales, the scores of the students who preferred the profession by their own willingness and said to select nursing profession again if they had another chance and felt competent about understanding the patients were found to be significantly high. If an individual chooses his/her profession willingly, this enables him/her to fulfill the functions of the profession by adopting the behaviors and responsibilities specific to that profession and to satisfy with the service he/she provides. In the study conducted by Birimoğlu and Ayaz¹⁶ to determine their care behavior perceptions, they reported that the scores of the students who selected the profession willingly were higher¹⁶. In another study, it was emphasized that the students who chose the nursing profession by their wishes and interest were more successful in clinical practices than the others and got more satisfaction from their profession²⁹. The results obtained from this study seem to be compatible with the literature. Considering that the student nurses will be the future nurses, it can be asserted that doing the job lovingly and willingly will increase the quality of care and therefore, patient satisfaction will increase. Therefore, it is necessary to help nursing students in gaining care behaviors during education and to follow-up and improve after their graduation.

Conclusion

It was determined that the care behaviors perceptions of the students were in a good level and the students' care behavior perceptions were affected by the factors like gender, nationality, class variable and preferring the profession willingly. In line with these results; it can be recommended to ensure that students willingly prefer the profession, to

conduct practices in providing the continuity of positive care behaviors of the students during the nursing education process and to conduct the study with a larger sample and by adding new variables with different sample groups.

Limitations of the Study

Since the research was conducted with the Nursing Department students in only two centers, the results obtained from the research can only be generalized for these students.

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