Araştırma Makalesi – Original Article

Determination of the Relationship Between Nurses' Care Behavior and Moral Sensitivity Levels*

Hemşirelerin Bakım Davranışları İle Ahlaki Duyarlılık Düzeyleri Arasındaki İlişkinin Belirlemesi

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ABSTRACT

Aim: This research aims to determine the relationship between nurses' care behaviors and moral sensitivity levels.

Methods: The sample of the study consists of nurses (N=445) who are working in the university and public hospital in Sivas and who agreed to participate in the study between June 1 and September 30, 2018. Personal Information Form, Caring Behaviors Inventory-24 (CBI-24) and Moral Sensitivity Questionnaire (MSQ) were used to collect research data. Data were evaluated by using frequency, mean, minimum and maximum values, standard deviation, Mann Whitney U test, and Kruskal-Wallis.

Results: The mean total score of CBI-24 has been found to be 5.12±0.63. The overall total score of MSQ is 93.14±21.79. It has been found out that there is a reverse and weak level (r=-259; p=0.001) relationship between the total score averages of MSQ and CBI scale, and this relationship is statistically significant. As the MSQ score average decreases, the CBI score average increases. Accordingly, as moral sensitivity increases, care behaviors also increase.

Conclusion: While the results of the research show that the nurses' moral sensitivity is at moderate level and their care behaviors are at good level, the care behaviors of nurses with high moral sensitivity are also higher.

Keywords: Care behavior, Nurse, Moral sensitivity

ÖZ

Amaç: Bu araştırmanın amacı hemşirelerin bakım davranışları ile ahlaki duyarlılık düzeyleri arasındaki ilişkiyi belirlemektir.

Yöntem: Araştırmanın örneklemini Sivas ilinde bulunan üniversite ve devlet hastanesinde çalışan ve 1 Haziran-30 Eylül 2018 tarihleri arasında araştırmaya katılmayı kabul eden hemşireler (N=445) oluşturmaktadır. Araştırma verilerinin toplanmasında Kişisel Bilgi Formu, Bakım Davranışları Ölçeği-24 (BDÖ-24) ve Ahlaki Duyarlılık Anketi (ADA) kullanılmıştır. Veriler frekans, ortalama, minimum ve maksimum değerler, standart sapma, Mann Whitney U testi ve Kruskal-Wallis kullanılarak değerlendirilmiştir.

Bulgular: BDÖ-24 toplam puan ortalaması 5,12±0,63 olarak bulunmuştur. ADA'nın genel toplam puanı 93.14±21.79'dur. ADA ve BDÖ-24 ölçeği toplam puan ortalamaları arasında ters ve zayıf düzeyde (r=-259; p=0,001) bir ilişki olduğu ve bu ilişkinin istatistiksel olarak anlamlı olduğu saptanmıştır. ADA puan ortalaması azaldıkça, BDÖ-24 puan ortalaması artar. Buna göre ahlaki duyarlılık arttıkça bakım davranışları da artmaktadır.

Sonuç: Araştırma sonuçları hemşirelerin ahlaki duyarlılıklarının orta düzeyde olduğunu ve bakım davranışlarının iyi düzeyde olduğunu göstermiştir. Ahlaki duyarlılığı yüksek olan hemşirenin iyi düzeyde bakım davranışına sahip olduğu saptanmıştır.

Anahtar Kelimeler: Bakım davranışı, Hemşire, Ahlaki duyarlılık

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Introduction

Care, one of the most important roles that make nursing a profession, is the basis of nursing practice.[1] Among the qualities that nurses should have in order to provide effective care are to have a sense of helping and common values, the ability to take responsibility and make decisions. In accordance with these features in the nursing profession, the concept of ethics comes to the fore in particular.[2] The autonomy of hospitalized individuals is under threat because they are in a changing environment and among people they do not know. It is the ethical responsibility of nurses to maintain patient autonomy within the framework of their defensive roles. However, with advances in patient care, ethical problems are frequently encountered during care.[3] Nurses should have a developed level of moral sensitivity in order to make the right decisions about recognizing and solving the ethical problems they face while providing care.[2,4] In nursing practice, moral sensitivity requires that nurses know their own values and use these values appropriately.[4,5] Moral sensitivity is the ability to take the necessary initiatives, make appropriate decisions, take responsibility, and understand the ethical consequences of a decision made on behalf of the patient.[6]

The feature that makes nursing care distinctive is that the moral and affective aspects of care are combined with professional knowledge and skills and reflected in the nurse-patient relationship. Care behaviors of nurses have been accepted as a basic factor in providing quality care, patient satisfaction, and improving the quality of life. Care behaviors include behaviors such as careful listening, comforting, honesty, patience, responsibility, providing information, touch, sensitivity, respect.[7,8] High moral sensitivity directly affects the quality of nursing care behaviors and quality of care that will be provided to patients and plays a significant role in the professionalization of the profession and in solving existing problems in care practices.[9]

It is thought that determining the attitudes and behaviors of nurses towards moral sensitivity, which is an important component of quality nursing care, will contribute to taking necessary measures. As a result of the literature review, there found a limited study that was conducted to determine the relationship between moral sensitivity and care behavior in nurses. Unlike our study, that study included surgical nurses as sample.[9] In this context, the research was carried out to determine the relationship between nurses' care behaviors and moral sensitivity levels.

Research questions:

1. What is the level of moral sensitivity of nurses?
2. What is the level of care behavior of nurses?
3. Is there a relationship between their care behavior and moral sensitivity according to their demographic characteristics?
4. Is there a relationship between their care behaviors and moral sensitivity?

Methods

The type of the study is descriptive. The population of the research consists of 804 nurses working actively in a university hospital and a state hospital in Sivas between 1 June and 30 September 2018. In the study, the samples are not chosen but all the nurses who were not on leave or not on sick leave, who accepted to participate in the study and who completed the data collection form were included in the study. 445 nurses (56% of all the nurses) formed the sample.

Data collection tools

In collecting the research data, a total of 3 forms were used: Personal Information Form and Caring Behaviors Inventory-24 (CBI-24) and Moral Sensitivity Questionnaire (MSQ).

Personal Information Form

This form, prepared by the researchers searching the literature[2,7-9], contains a total of 10 questions including age, gender, marital status, educational status, working year in the profession, the unit in which s/he works, the number of patients in the unit, the adequacy of the care allocated to patients, the status of loving the nursing profession and the status of taking ethics classes during the education period.

Caring Behaviours Inventory (CBI-24)

The scale, created by Wu et al., is a short form of the 42-item "Caring Behaviors Inventory-42 (CBI-42)" developed by Wolf et al. and suitable for bilateral diagnosis by patients and nurses.[10,11] The scale was designed to evaluate the nursing care process and created by Wu et al.[10] Turkish validity and reliability study of CBI-24 was conducted by Kursun and Kanan, and the scale consists of 4 subgroups and a total of 24 items: scale assurance (8 items), knowledge-skill (5 items), respectfulness (6 items) and commitment (5 items), and. A 6-point Likert-type scale (1=never, 2=almost never, 3=sometimes, 4=usually, 5=often, 6=always) is used for the answers.[12] After the scores of 24 items of the scale are summed up, they are divided into 24 and a scale score of 1-6 is obtained. For each sub-dimension, the scores of the items in the sub-dimensions are summed up and the score obtained is divided by the number of items, and sub-dimension scores are obtained between 1-6 points. The internal consistency of the scale for both patients and nurses ranges from 0.96 in total, to 0.81-0.94 in subgroups.[12] In our study, the Cronbach alpha value of the scale was found to be 0.95.

Moral Sensitivity Questionnaire - MSQ

The MSQ was created by Kim Lutzen and its Turkish validity and reliability study was conducted by Tosun.[13,14] In this study, the Cronbach alpha value of MSQ was found as 0.84. The scale is a 7-point Likert type scale consisting of 30 statements, and it is evaluated as between "totally agree 1" statement, and "never agree 7" statement. The total score that can be obtained from the scale varies between 30-210. The high score to be obtained from the survey indicates ethically low sensitivity, and the low score indicates ethically high sensitivity. The six sub-dimensions of the survey are; autonomy (refers to the principle of autonomy and respect for the patient's personal preferences), benefit (refers to actions that could give the individual a benefit and increase the benefits during health care), a holistic approach (reflects actions that do not harm the patient but also protect the integrity of the patient), conflict (refers to experiencing an internal ethical conflict), implementation (demonstrates considering the ethical dimension in decision-making and implementation of action), orientation (reflects the interests of healthcare professionals in their actions that may affect their relationship with the patients/healthy individuals).[14] In our study, the Cronbach alpha value of the scale was found to be 0.85.

Data Analysis

The data obtained from the research were evaluated using SPSS.22 statistical package software. The data were evaluated by using frequency, mean, minimum and maximum values, standard deviation, Mann Whitney U test and Kruskal-Wallis. Correlation analysis was used to determine the direction and level of the relationship between variables, and the margin of error was taken as 0.05.

Ethical Approval

Before starting the research, Ethics Committee Approval (Decision No: 2018-05/13; Date: 28.05.2018) from Sivas Cumhuriyet University Non-Interventional Clinical Research and written permission were obtained from the institutions where the research was conducted. The permission of the scale use was obtained from the researchers who developed the scale. After the Informed Consent Form was applied to the individuals participating in the research, and their permissions were obtained, data collection forms were applied.

Results

The age average of the nurses is 29.19±6.99, 76.4% are women, 64.5% have Bachelor's degree, 50.8% are single, 68.5% are working willingly, 28.1% have been working for 1 to 5 years, 61.3% are working in inpatient service, 28.1% have been working in the same unit for 1 to 5 years, 45.4% can spend enough time for patient care, 95.1% took ethics classes.

Table 1 shows the scores taken from CBI-24, the MSQ and the sub-dimensions. CBI-24 overall total score average is 5.12±0.63, and the mean scores of knowledge-skill, assurance, respectfulness and commitment are 5.41±0.70, 5.15±0.66, 5.04±0.70, 4.90±0.74, respectively. The overall total score of MSQ is 93.14±21.79, and the mean scores of autonomy, holistic approach, benefit, conflict, implementation and orientation sub-dimensions are found to be 19.55±6.77, 13.31±4.94, 13.15±4.66, 13.20±3.68, 13.17±4.34, 9.28±4.24, respectively.

Table 1. Caring Behaviors Inventory-24 and Moral Sensitivity Questionnaire Average Scores of the Nurses (N=445)

Scale	Min-Max	Min-Max	X±SS
Caring Behaviors Inventory-24	1.00-6.00	2.75-6.00	5.12±0.63
Knowledge-skill	1.00-6.00	2.40-6.00	5.41±0.64
Assurance	1.00-6.00	2.25-6.00	5.15±0.66
Respectfulness	1.00-6.00	2.33-6.00	5.04±0.70
Commitment	1.00-6.00	2.60-6.00	4.90±0.74
Moral Sensitivity Questionnaire	30.00-210.00	30.00-176.00	93.14±21.79
Autonomy	7.00-49.00	7.00-43.00	19.55±6.77
Holistic aproach	5.00-35.00	5.00-34.00	13.31±4.94
Benefit	4.00-28.00	4.00-25.00	13.15±4.66
Conflict	3.00-21.00	3.00-21.00	13.20±3.68
Implemention	4.00-28.00	4.00-27.00	13.17±4.34
Orientation	4.00-28.00	4.00-25.00	9.28±4.24

When ***Table 2*** is examined, it has been found that the average score of "assurance" sub-dimension of women and married nurses is significantly higher ($p<0.05$). According to the gender and marital status of the nurses, there is no significant difference between the groups in terms of the scale total score and other sub-dimensions ($p>0.05$). The CBI-24 scale total and subscale mean scores of the nurses who are working willingly and who can spend enough time for care are significantly higher ($p<0.05$). The "respectfulness" and "commitment" sub-dimensions of the intensive care nurses' caring behaviors and the scale total score have been found to be significantly higher than the nurses working in other clinics ($p<0.05$). There is no significant difference between the groups in terms of CBI-24 total score and the total score of all sub-dimensions according to age, educational status, working year in the profession, and the status of taking ethics classes during the educational period ($p>0.05$).

Table 2. The Distribution of the Nurses' Caring Behaviors Inventory-24 Total and Sub-Dimension Scores According to Some Features

	Assurance M(Min-Max)	Knowledge-skill M(Min-Max)	Respectfulness M(Min-Max)	Commitment M(Min-Max)	CBI-24 Total M(Min-Max)
Age					
18-29 (n=283)	5.25(2.38-6.00)	5.60(2.40-6.00)	5.00(2.67-6.00)	5.00(2.60-6.00)	5.20(2.75-6.00)
30-39 (n=111)	5.25(2.25-6.00)	5.60(2.33-6.00)	5.00(2.33-6.00)	5.00(2.80-6.00)	5.16(2.79-6.00)
40 age and above (n=51)	5.37(4.00-6.00)	5.80(4.60-6.00)	5.00(3.83-6.00)	5.00(3.60-6.00)	5.29(4.08-6.00)
KW / p value	**3.570 / 0.168**	**2.824 / 0.244**	**0.401 / 0.818**	**0.912 / 0.634**	**1.854 / 0.396**
Gender					
Female (n=340)	5.25(3.13-6.00)	5.60(3.20-6.00)	5.16(3.33-6.00)	5.00(2.80-6.00)	5.25(3.42-6.00)
Male (n=105)	5.00(2.25-6.00)	5.60(2.40-6.00)	5.00(2.33-6.00)	5.00(2.60-6.00)	5.04(2.75-6.00)
Z / p value	**2.169 / 0.030***	**0.121 / 0.904**	**0.726 / 0.468**	**0.825 / 0.410**	**1.178 / 0.239**
Educational status					
High School Graduate (n=66)	5.25(3.38-6.00)	5.60(2.00-6.00)	5.00(3.17-6.00)	4.80(3.00-6.00)	5.04(3.42-6.00)
Associate Degree (n=55)	5.37(4.00-6.00)	5.60(4.60-6.00)	5.16(3.67-6.00)	5.20(3.20-6.00)	5.25(4.13-6.00)
University Graduate (n=287)	5.25(2.25-6.00)	5.60(3.20-6.00)	5.16(2.33-6.00)	5.00(2.60-6.00)	5.20(2.75-6.00)
Postgraduate (n=37)	5.12(4.00-6.00)	5.40(4.20-6.00)	5.16(3.50-6.00)	4.80(3.80-6.00)	5.08(3.92-6.00)
KW / p value	**4.668 / 0.198**	**1.894 / 0.595**	**1.148 / 0.765**	**1.072 / 0.784**	**2.378 / 0.498**
Marital status					
Married (n=226)	5.25(2.38-6.00)	5.60(3.40-6.00)	5.16(2.67-6.00)	5.00(2.60-6.00)	5.25(2.75-6.00)
Single (n=219)	5.00(2.25-6.00)	5.60(2.40-6.00)	5.00(2.33-6.00)	5.00(2.80-6.00)	5.12(2.79-6.00)
Z / p value	**2.098 / 0.036***	**1.257 / 0.209**	**1.008 / 0.313**	**1.160 / 0.246**	**1.581 / 0.114**
The status of working in the profession willingly					
Yes (n=305)	5.37(2.25-6.00)	5.16(2.33-6.00)	5.00(2.80-6.00)	5.00(2.80-6.00)	5.29(2.79-6.00)
No (n=140)	5.60(2.40-6.00)	5.00(2.67-6.00)	4.70(2.60-6.00)	4.70(2.60-6.00)	4.97(2.75-6.00)
Z / p değeri	**4.594 / 0.001***	**2.661 / 0.015***	**2.661 / 0.008***	**3.213 / 0.001***	**3.683 / 0.001***
Working unit in which s/he works					
Inpatient service (n=273)	5.25(2.25-6.00)	5.60(3.00-6.00)	5.16(2.33-6.00)	5.00(2.60-6.00)	5.20(2.79-6.00)
Intensive care service (n=130)	5.25(2.38-6.00)	5.80(2.40-6.00)	5.33(2.67-6.00)	5.10(2.80-6.00)	5.29(2.75-6.00)
Emergency service (n=42)	4.93(3.63-6.00)	5.40(3.80-6.00)	4.83(3.17-6.00)	4.60(3.20-6.00)	4.95(3.46-6.00)
KW / p value	**6.992 / 0.030***	**5.152 / 0.760**	**15.047 / 0.001***	**11.155 / 0.004***	**10.959 / 0.004***
Working year in the profession					
Less than a year (n=107)	5.00(3.38-6.00)	5.40(3.60-6.00)	5.00(3.50-6.00)	4.80(3.20-6.00)	5.04(3.50-6.00)
1-5 years (n=125)	5.12(2.25-6.00)	5.60(2.40-6.00)	5.00(2.33-6.00)	5.00(2.80-6.00)	5.12(2.79-6.00)
5-10 years (n=113)	5.25(2.38-6.00)	5.60(2.40-6.00)	5.16(2.67-6.00)	5.00(2.60-6.00)	5.29(2.75-6.00)
10-20 years (n=64)	5.37(4.00-6.00)	5.60(4.00-6.00)	5.33(3.50-6.00)	5.00(3.20-6.00)	5.35(4.00-6.00)
20 years and above (n=36)	5.37(4.00-6.00)	5.80(4.60-6.00)	5.16(4.00-6.00)	5.00(3.60-6.00)	5.27(4.08-6.00)
KW / p value	**5.888 / 0.117**	**5.550 / 0.140**	**4.447 / 0.217**	**5.084 / 0.166**	**6.105 / 0.107**
The adequacy of the care allocated to patients					
Yes (n=202)	5.37(2.25-6.00)	5.60(2.40-6.00)	5.33(2.33-6.00)	5.20(3.00-6.00)	5.37(2.79-6.00)
No (n=78)	5.12(3.38-6.00)	5.40(2.40-6.00)	5.00(3.17-6.00)	4.80(2.80-6.00)	5.08(3.42-6.00)
Partially (n=165)	5.00(2.38-6.00)	5.40(3.40-6.00)	4.83(2.67-6.00)	4.60(2.60-6.00)	4.97(2.75-6.00)
KW / p value	**22.139 / 0.001***	**8.560 / 0.014***	**24.789 / 0.001***	**28.412 / 0.001***	**24.184 / 0.001***
The status of taking ethics classes during the educational period					
Yes (n=407)	5.25(2.38-6.00)	5.60(2.40-6.00)	5.16(2.67-6.00)	5.00(2.60-6.00)	5.20(2.75-6.00)
No (n=38)	5.00(2.25-6.00)	5.60(2.40-6.00)	4.83(2.33-6.00)	5.00(2.80-6.00)	5.06(2.79-6.00)
Z / p value	**0.698 / 0.485**	**0.697 / 0.486**	**0.914 / 0.361**	**0.049 / 0.961**	**0.591 / 0.555**

*p<0.05; M: Median; KW:Kruskall Wallis test; Z:Mann-Whitney U test

According to ***Table 3***, the "holistic approach" and "orientation" sub-dimension sensitivity of the nurses who are 40 years old and above are statistically and significantly higher (p<0.05). While the "autonomy" sub-dimension sensitivity of female nurses has been found to be significantly lower (p<0.05), no significant difference has been found between the genders in terms of scale total score and other sub-dimension sensitivities (p>0.05). According to the education level of the nurses, "autonomy" and "practice" sub-dimensions and "scale total" moral sensitivities have been found to be significantly higher in nurses who are high school graduates (p<0.05), but there is no significant difference determined between the groups in terms of other sub-dimensional sensitivity (p>0.05). The "holistic approach" sub-dimension sensitivity of nurses who work willingly has been found to be statistically and significantly higher (p<0.05), but no significant difference has been found between the groups in terms of the total score of the scale and other

sub-dimension sensitivities (p>0.05). The moral sensitivity of the intensive care nurses, "autonomy", "holistic approach" and "application" sub-dimension sensitivities and "scale total" moral sensitivities are significantly higher than the nurses working in other clinics (p<0.05). There is no significant difference between the groups in terms of moral sensitivity total score and all sub-dimensional sensitivities according to marital status, working year in the profession, and the status of taking ethics classes during the education period (p> 0.05).

Table 3. The Distribution of the Nurses' Moral Sensitivity Questionnaire Total and Sub-Dimension Scores According to Some Features

	Autonomy M(Min-Max)	Benefit M(Min-Max)	Holistic aproach M(Min-Max)	Conflict M(Min-Max)	Implemention M(Min-Max)	Orientation M(Min-Max)	MSQ Total (30-210) M(Min-Max)
Age							
18-29 (n=283)	20(7-43)	13(4-25)	13(5-34)	13(3-21)	13(4-27)	9(4-25)	92(30-176)
30-39 (n=111)	20(7-35)	14(4-23)	14(5-31)	13(3-21)	13(5-27)	9(4-23)	94(48-157)
40 age and above (n=51)	18(7-36)	12(4-22)	11(5-30)	15(3-21)	12(4-22)	7(4-24)	87(42-150)
KW / p value	***2.943 / 0.230***	***4.683 / 0.096***	***9.296 / 0.010****	***5.495 / 0.064***	***3.218 / 0.200***	***12.657/0.002****	***5.024 / 0.081***
Gender							
Female (n=340)	20(7-38)	13(4-23)	13(5-34)	14(3-21)	13(4-27)	9(4-24)	93(42-163)
Male (n=105)	18(7-43)	14(4-25)	13(5-26)	13(3-21)	12(4-25)	8(4-25)	91(30-176)
Z / p value	***2.350 / 0.019****	***0.283 / 0.777***	***0.780 / 0.435***	***2.398 / 0.163***	***1.906 / 0.057***	***0.322 / 0.748***	***1.391 / 0.164***
Educational status							
High School Graduate (n=66)	17(7-43)	12(4-25)	12(5-25)	13(3-21)	11(4-25)	8(4-25)	84(30-176
Associate Degree (n=55)	18(7-38)	12(4-23)	12(5-34)	13(3-21)	13(4-25)	9(4-24)	89(41-163)
University Graduate (n=287)	20(7-38)	14(4-23)	13(5-31)	14(3-21)	14(4-27)	9(4-23)	96(30-157)
Postgraduate(n=37)	20(9-35)	14(5-22)	13(5-23)	13(9-19)	13(5-21)	9(4-17)	93(55-125)
KW / p value	***8.557 / 0.036****	***7.325 / 0.062***	***4.124 / 0.248***	***4.039 / 0.257***	***16.464 / 0.001****	***2.905 / 0.407***	***12.464 / 0.006****
Marital status							
Married (n=226)	20(7-38)	13(4-23)	12(5-34)	14(3-21)	13(4-27)	8.5(4-24)	92(39-163)
Single (n=219)	19(7-43)	14(4-25)	13(5-26)	13(3-21)	13(4-25)	9(4-25)	93(30-176)
Z / p value	***0.324 / 0.746***	***0.707 / 0.480***	***1.628 / 0.104***	***1.590 / 0.112***	***0.798 / 0.425***	***0.101 / 0.919***	***0.191 / 0.849***
The status of working in the profession willingly							
Yes (n=305)	20(7-43)	13(4-23)	12(5-34)	14(3-21)	13(4-26)	9(4-25)	93(30-176)
No (n=140)	19(7-38)	13.5(4-25)	14(5-25)	13(3-20)	13(4-27)	9(4-21)	91.5(30-153)
Z / p value	***0.304 / 0.761***	***0.319 / 0.749***	***2.667 / 0.008****	***1.432 / 0.152***	***0.605 / 0.545***	***1.631 / 0.103***	***0.036 / 0.972***
Working unit in which s/he works							
Inpatient service (n=273)	20(7-38)	13(4-23)	13(5-34)	13(3-21)	13(4-27)	9(4-24)	92(30-163)
Intensive care service (n=130)	18(7-43)	13(4-25)	12(5-25)	14(3-21)	12(4-25)	8(4-25)	89.5(30-176)
Emergency service (n=42)	21.5(11-31)	15(5-21)	15(7-26)	13(7-19)	15(8-22)	10(5-22)	99.5(65-146)
KW / p value	***10.602/0.005****	***1.834 / 0.400***	***19.043/0.001 ****	***1.602 / 0.444***	***13.697/0.001****	***1.122 / 0.571***	***10.652/ 0.005****
Working year in the profession							
Less than a year (n=107)	20(7-38)	13(4-22)	14(5-25)	13(3-21)	13(4-22) /	9(4-20)	93(30-132)
1-5 years (n=125)	20(7-38)	14(4-25)	13(5-34)	13(5-21)	13(4-27)	9(4-23)	95(48-163)
5-10 years (n=113)	19(7-43)	13(4-23)	13(5-24)	14(3-21)	13(4-27)	9(4-25)	92(41-176)
10-20 years (n=64)	19(7-36)	14(4-23)	12(5-31) /	14(5-21)	13(5-25)	9(4-23)	92.5(60-157)
20 years and above (n=36)	18(7-34)	11(4-22)	11(5-30)	14.5(3-21)	12(4-22)	7(4-24)	87(42-150)
Z / p value	***1.734 / 0.629***	***0.957 / 0.812***	***2.087 / 0.555***	***3.460 / 0.326***	***0.192 / 0.979***	***4.628 / 0.201***	***1.734 / 0.629***
The status of taking ethics classes during the educational period							
Yes (n=407)	19(7-38)	13(4-25)	13(5-34)	13(3-21)	13(4-27)	9(4-24)	92(30-163)
No (n=38)	22(7-43)	11(4-22)	13(5-25)	14(3-21)	12(4-25)	8.5(4-25)	95(30-176)
Z / p value	***1.872 / 0.061***	***1.433 / 0.152***	***0.079 / 0.937***	***0.680 / 0.497***	***0.208 / 0.835***	***0.281 / 0.778***	***0.090 / 0.929***

*p<0.05; M: Median; KW:Kruskall Wallis test; Z:Mann-Whitney U test

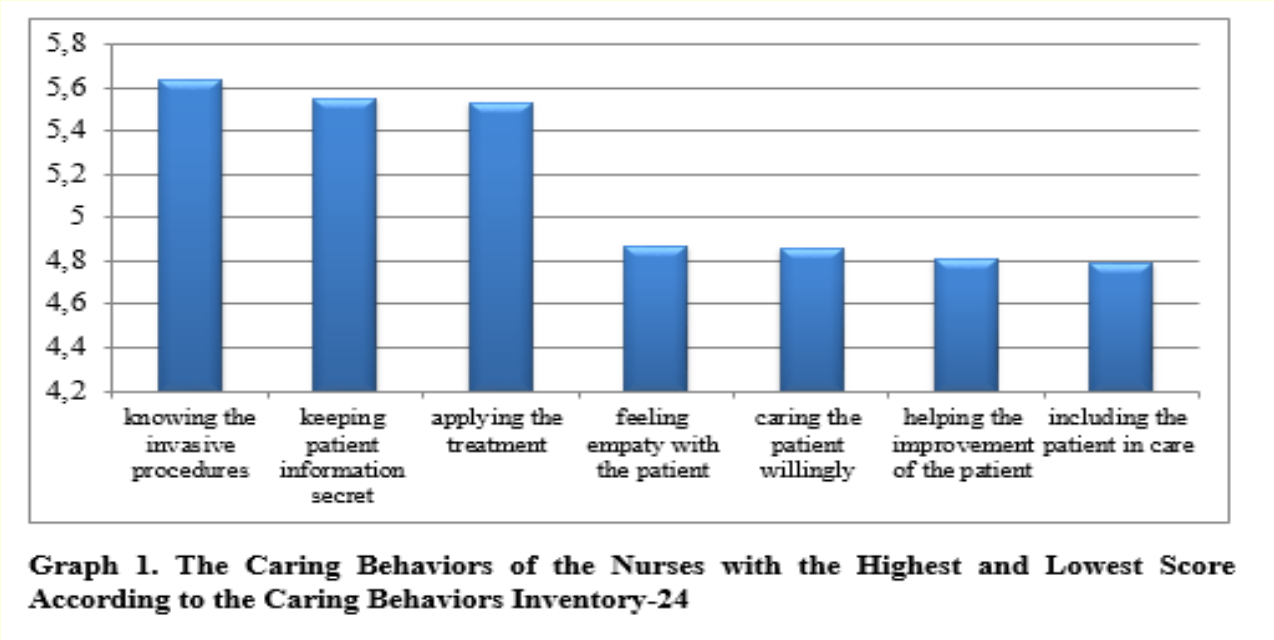
According to ***Table 4***, it has been found out that there is a slight and inverse (r=-259; p=0.001) relationship between MSQ and CBI-24 scale total average scores, and this relationship is statistically significant. As the MSQ score average decreases, CBI-24 score average increases. Accordingly, as moral sensitivity increases, caring behaviors increase.

Table 4. The Correlation Analysis Table of Caring Behaviors Inventory-24 and Moral Sensitivity Questionnaire Total Scores and Sub-Dimensions

	Autonomy	Benefit	Holistic aproach	Conflict	Implemention	Orientation	MSQ Total
Assurance	r=-252 **p=0.001***	r=-167 **p=0.001***	r=-385 **p=0.001***	r=205 **p=0.001***	r=-025 p=0.605	r=-382 **p=0.001***	
Knowledge-skill	r=-272 **p=0.001***	r=-129 **p=0.007***	r=-337 **p=0.001***	r=-222 **p=0.001***	r=-123 **p=0.010***	r=-342 **p=0.001***	
Respectfulness	r=-247 **p=0.001***	r=-143 **p=0.002***	r=-344 **p=0.001***	r=-151 **p=0.001***	r=-079 **p=0.001***	r=-339 **p=0.001***	
Commitment	r=-262 **p=0.001***	r=-159 **p=0.001***	r=-351 **p=0.001***	r=-178 **p=0.001***	r=-051 p=0.280	r=-366 **p=0.001***	
CBI-24 Total							r=-259 **p=0.001***

***p<0.05**

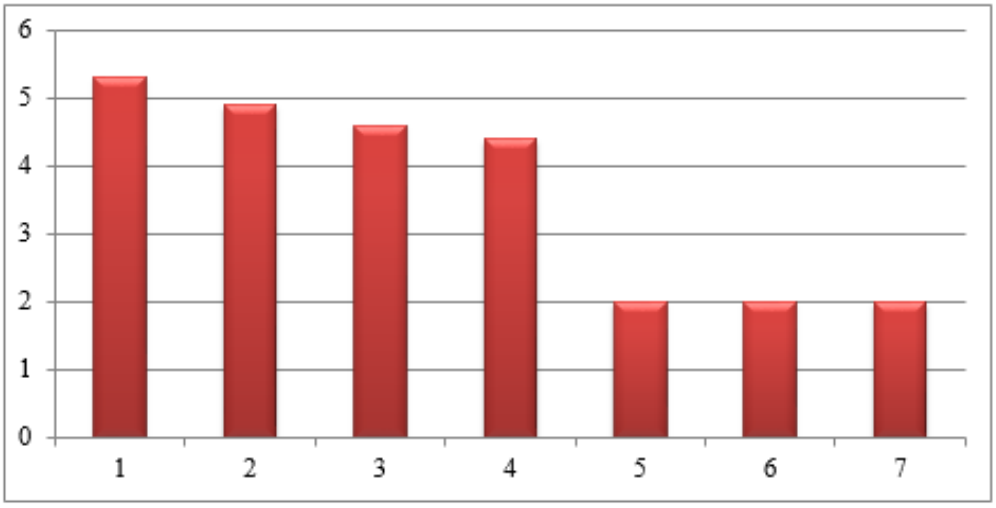
Graph 1 "shows the CBI-24 items with the highest and lowest mean scores of nurses in this study. It has been found that the behaviors with the highest average score are "knowing how to apply the initiatives such as giving an injection and intravenous injection," "keeping patient information secret," and "giving the medication to the patient on time," and behaviors with lowest average score have been found to be "feeling empathy with the patient", "caring the patient willingly", "helping the improvement of the patient" and "including the patient in care".



Graph 1. The Caring Behaviors of the Nurses with the Highest and Lowest Score According to the Caring Behaviors Inventory-24

When ***Graph 2*** is examined, the high score obtained from the statements in the questionnaire indicates low ethical sensitivity, and the low score shows high ethical sensitivity. Accordingly, the low-sensitivity statements of the nurses have been determined as "I often have contradictions about how to approach the patient," "When oral treatment is rejected by the patient, there are sometimes valid reasons to threaten the patient with injections," "I often encounter situations where I have difficulty to decide what the right ethical

action is," "If I can't see an improvement in my patients, I feel that my job makes no sense." In addition, the statements of the nurses with high-sensitivity are "I believe that the nurse-patient relationship is a very important factor in care/treatment practices," "I believe that good care involves patient participation," "My responsibility as a nurse is to have information about the general condition of the patient."



Graph 2. The Expressions of the Nurses with the Highest and Lowest Scores According to the Moral Sensitivity Questionnaire

"(1) I often have contradictions about how to approach the patient," "(2) When oral treatment is rejected by the patient, there are sometimes valid reasons to threaten the patient with injections," "(3) I often encounter situations where I have difficulty to decide what the right ethical action is," "(4) If I can't see an improvement in my patients, I feel that my job makes no sense." In addition, the statements of the nurses with high-sensitivity are "(5) I believe that the nurse-patient relationship is a very important factor in care/treatment practices," "(6) I believe that good care involves patient participation," "(7) My responsibility as a nurse is to have information about the general condition of the patient."

Discussion

It is important that nurses have a developed level of moral sensitivity in order to solve the ethical problems frequently encountered in patient care and to improve the quality of care. In the study, it has been determined that the caring behaviors of the nurses are at good level and their moral sensitivity is at moderate level.

Discussing the results of the Caring Behaviors Inventory-24

In our study, CBI-24 overall and sub-dimension mean scores have been found high. The highest "knowledge-skill" and the lowest "commitment" sub-dimensions are similar to other studies.[15-17] It is thought that this situation in our study is due to the fact that most of the nurses are university graduates, between the ages of 18-29 and their work experience is between 1-5 years.

In our study, it has been found that the caring behaviors of nurses who work willingly are significantly higher. Contrary to our study, Kursun found that there is no significant difference between the mean scores of the nurses who work willingly and unwillingly.[17] In accordance with the results of our study, it is thought that high job satisfaction and work experience of the nurses who willingly work have a significant effect on caring behaviors such as assurance, respectfulness, commitment and knowledge-skill.

Care behaviors of intensive care nurses are significantly better than nurses working in other clinics. This result may have been affected by the fact that the autonomy of intensive care patients is more threatened, they

depend on the nurse for physical care, these patients require more attentive care and that the nurse spends more time with the patient due to the very nature of the clinic. The "assurance" caring behavior of the nurses working in the emergency service has been found to be significantly lower. This can be explained by the fact that patients coming to the emergency service are outpatient, leave the hospital by taking the nursing care for a short time, and there is intense circulation in this service.

It has been found out that the nurses who can spend enough time on patient care have significantly better caring behaviors. Similarly, while Yurun[18] stated that the nurses who can spend enough time for patient care have significantly better caring behaviors, contrary to our study, Gogus stated in his study that there is no significant difference.[19] In our study, it is thought that the nurses who spend enough time for patient care have more job satisfaction with the thought that they provide more qualified care, and so their caring behaviors are positively affected. Workload and the number of inpatients may have affected the time allocated to the patient.

When the item point averages of the CBI-24 of the nurses are examined in our study, the highest score has been given to initiatives such as giving an injection, intravenous administration and giving the medication to the patient, and the fact that the lowest score has been given to feeling empathy with the patient and support the development of the patient supports the conclusion that this scale's "knowledge-skill" sub-dimension score is the highest and the "commitment" sub-dimension score is the lowest *(Graph 1 and Table 1).* This result can be expressed by the fact that nurses focus lesser on the psychosocial care behaviors of patients, leaving them in the background, and their perception of care is skill-centered. It is thought that attention should be drawn to this situation.

Discussing the results of the Moral Sensitivity Questionnaire

In our study, the fact that the moral sensitivity of the nurses is at a medium level supports the other study results.[20-26] This result may have been affected by the fact that most of the nurses in our study are young and have low professional working time.

In our study, it has been found that sensitivity in sub-dimensions of "holistic approach" and "orientation" increase significantly with advanced age. Similar to the findings of our study, studies have been found in which the "orientation" sub-dimension and the "holistic approach" sub-dimension moral sensitivity significantly increase with increased age.[26-28] It can be said that, due to the increasing professional experience of the nurses in the older age group, they encounter ethical dilemmas more frequently, and so their critical thinking skills develop and this situation is effective in clinical decision-making in terms of orientation and holistic approach sub-dimensions.

It has also been found that the nurses who are "high school graduates" have higher moral sensitivity. Contrary to our study, Ertug et al. stated that moral sensitivities of the nurses who are university graduates are significantly higher, but there are some studies reporting that there is no significant difference between nurses' educational status and moral sensitivity.[24,29,30] According to the results of our study, the generalization of this information is thought to be limited due to the low number of high school graduates.

In addition, it has been revealed that the nurses who work willingly have a higher level of "holistic approach" sensitivity, which supports the literature.[27,31] According to these findings, it can be stated that the status of working willingly is a driving force or motivation in nursing approaches and it also provides readiness of the nurses.

In this present study, it has also been found out that the sensitivity of "autonomy", which reflects the nurse's self-decision making skills, is the lowest, and the sensitivity of "orientation", which reflects the nurse's

interest in the actions that may affect their relations with the individual, is the highest. From the CBI-24 item score averages, the highest score given by the nurses to skill-based initiatives also supports this result. When the literature studies are evaluated, it has been revealed that the results of several studies are similar to our study.[9,21,25,28] In-service training and orientation programs in hospitals are thought to have effect on the "orientation" sub-dimension of status of working willingly. In addition, the fact that nurses work in different clinics, their work experience is low, and the physician generally takes more responsibility in solving the ethical problems encountered are thought to affect the "autonomy" sub-dimension.

The intensive care unit nurses' "autonomy", "holistic approach" and "implementation" sub-dimensions of the moral sensitivity and the scale total sensitivity have been found to be significantly higher. This can be explained by the fact that the intensive care patients have higher care needs, the nurses find more practice environments in intensive care, the clinic-specific ethical dilemmas are experienced more and the nurses spend more time with the patient.

According to our research findings, there is no significant difference between the status of taking ethics classes in nursing and their ethical sensitivities, which supports the literature.[25,32] This may be due to the fact that the ethics classes in the curriculum of nursing schools are theoretically taught and are not applied as clinical ethics and the lessons are conducted mostly by people who are not specialized in ethics. Furthermore, this result might have been affected by the lack of unity of ethics classes in curriculum given in Turkey.

When the relationship between moral sensitivity and caring behaviors in nurses is analyzed, it has been observed that the moral sensitivity increase as care behaviors increase *(Table 4)*. Similar to our findings, while Mert Boga et al., Shahvali et al. and Milliken stated that there is a relationship between the caring behavior of nurses and hence the quality of care, Amiri et al. reported that there is no significant relationship between the caring behavior and the quality of care.[9,31,33,34] Since nurses with moral sensitivity use ethical principles by making it a specific guide in decision making, it has been thought that their care behaviors also increase positively.

Conclusions and Recommendations

The results of the research have shown that the moral sensitivity of the nurses is at moderate level and their caring behaviors are at good level. The nurse with higher moral sensitivity has been found to have a good level of caring behavior. Besides, it has been revealed that nurses focus on skill-centered caring behaviors rather than the psychosocial aspect of patients and their autonomy moral sensitivity is low. However, it has been observed that intensive care unit nurses have higher perception of care behaviors and moral sensitivities, and they adopt patient autonomy more. The nurses who work willingly have higher caring behaviors and holistic moral sensitivity.

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Ethical Approval

Ethics Committee Approval (Decision No: 2018-05/13; Date: 28.05.2018) from Sivas Cumhuriyet University Non-Interventional Clinical Research and written permission were obtained from the institutions where the research was conducted.

Author Contributions

Ezgi Yıldız: Idea/concept, design, data collection and/or processing, analysis or interpretation, literature review, article writing, critical review.

Gülay Yıldırım: Idea/concept, design, supervision/consulting, analysis or interpretation, article writing, critical review.

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