

# Individualized Care in The Covid-19 Pandemic: Perceptions of Patients and Nurses

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## Abstract

### Aim

Individualized care is patient-centred and personalized care. The Covid-19 disease affects the individualized care perceptions of both patients and nurses. The aim of this study was to determine the individualized care perceptions of patients and nurses in the Covid-19 pandemic.

### Methods

This descriptive study was conducted between December 2020 and March 2021 with 154 nurses working in Covid-19 clinics and intensive care units of a training and research hospital in İstanbul/Turkey and 213 patients hospitalized due to Covid-19. The data were collected with "Patient Information Form" and "Individualized Care Scale-B-Patient" for patients, and "Nurse Information Form" and "Individualized Care Scale-B-Nurse" for nurses.

### Results

While 64.3% (n=137) of the patients considered that they received individualized care, only 45.5% (n=70) of the nurses stated that they believed they provided individualized care to their patients. The mean individualized care scale scores of patients and nurses were  $4.02 \pm 0.93$  and  $4.15 \pm 0.44$ , respectively, and it was determined that there was no significant difference between the scale scores of patients and nurses.

### Conclusion

In this study, the individualized care perceptions of Covid-19 patients and nurses providing care were found to be quite high considering the conditions in the pandemic process. It is believed that improving the working conditions of nurses and overcoming barriers to provide individualized care will improve the quality of care.

**Keywords:** Covid-19, Nursing care, Individualized care, Pandemic

## Introduction

The new coronavirus disease (Covid-19), a viral disease that emerged in China, was declared a pandemic by the World Health Organization and it causes a variety of symptoms ranging from the common cold, dry cough, high fever to severe respiratory failure<sup>1</sup>. Pneumonia and lung failure are observed in the later stages of the disease, causing patients to be intubated and followed up in the intensive care units<sup>2</sup>. Among the healthcare professionals involved in the treatment and care of patients hospitalized due to Covid-19 disease, nurses take the greatest responsibility for care. Therefore, providing quality and individualized care to patients in line with the nursing care process is among the most important responsibilities of nurses<sup>3</sup>.

Individualized care is defined as the care provided cooperatively and respectfully, taking into account the needs of the patient and the family, their values, cultural backgrounds, and beliefs<sup>4</sup>. With individualized care, the quality and safety of healthcare increases, disease management is provided, anxiety is reduced, patient satisfaction and quality of life increase, and by reducing the use of health care services positive contributions are made to the cost. In addition, it improves functional status and clinical care by reducing mortality, medical errors, and infections<sup>5,6,7</sup>.

Individualized care is essentially based on the uniqueness of

the individual. Each person's life experiences, behaviours, thoughts, individual characteristics, and reactions to events are different. Even in patients with similar clinical features due to the same diagnosis or disease, individuals' responses to the care needs vary<sup>8,9</sup>. Nurses who adopt individualized care approach realize that each patient is unique and try to provide care in all conditions with this understanding<sup>10</sup>. Reasons such as the insufficient number of nurses, excessive workload, and extra duties prevent nurses from providing individualized care<sup>11</sup>. Moreover, their efforts to protect themselves due to the pandemic and the nursing care they continue to offer to the patients at the same time are important obstacles to the individualization of care. Nurses continue to strive to provide patient-centred individualized care which includes quality nursing interventions specific for individuals rather than providing standard work-oriented care to all patients diagnosed with Covid-19<sup>12</sup>. Providing individualized care for hospitalized Covid-19 patients is of great importance for both their physiological and psychological recovery. So, with individualized care, an environment of trust is created between patients and nurses, and the necessary care is applied to patients more effectively<sup>13</sup>. However, together with the uncertainties created by the Covid-19 pandemic, it is believed that nurses' remaining in between maintaining patient care and protecting themselves, and patients' struggling in between staying in isolation and

**Table 1. Demographic Characteristics of the Patients**

		<b>n</b>	<b>%</b>
<b>Gender</b>	Female	91	42.7
	Male	122	57.3
<b>Marital status</b>	Married	176	82.6
	Single	37	17.4
<b>Educational level</b>	Illiterate	5	2.3
	Primary Education	90	42.3
	Associate's Degree	30	14.1
	Bachelor's Degree	56	26.3
	Postgraduate Diploma	32	15.0
<b>Employment status</b>	Employed	107	50.2
	Unemployed	106	49.8
<b>Health insurance</b>	Yes	204	95.8
	No	9	4.2
<b>Place of residence</b>	Living with family	188	88.3
	Living alone	21	9.9
	Other	4	1.9
<b>History of hospitalization</b>	Yes	138	64.8
	No	75	35.2
<b>Individualized nursing care perception during the hospital stay</b>	Yes	137	64.3
	No	76	35.7
<b>Age</b>	<b>Mean±SD</b>	<b>Min</b>	<b>Max</b>
	53.11±13.86	22	92

needing care affects their perceptions of individualized care. In this regard, this study was conducted to determine the individualized care perceptions of patients and nurses in the Covid-19 pandemic.

## Methods

### Setting and Participants

This study was planned as a descriptive type. The population of the study consisted of 158 nurses working in Covid-19 clinics and ICUs of a training and research hospital in Istanbul/Turkey and 430 patients hospitalized due to Covid-19 between December 2020 and March 2021. Sample selection was not made and all nurses and patients were reached for the study. Inclusion criteria for patients included hospitalized due to the diagnosis of Covid-19, had no health problems in communicating, aged 18 years or older, and agreed to participate in the study. Inclusion criteria for nurses included provided care for a Covid-19 patient, agreed to participate in the study. The study was completed with 154 nurses and 213 patients who met the inclusion criteria and volunteered.

### Instruments

Data were collected from patients via "Patient Information Form" and "Individualized Care Scale-B", and from nurses via "Nurse Information Form" and "Individualized Care Scale-B-Nurse".

**Patient Information Form:** It consists of 9 questions including the age, gender, marital status, educational level, employment status, health insurance, place of residence, history of hospitalization, and individualized care perception of the patients.

**Nurse Information Form:** It consists of 17 questions including the age, gender, marital status, educational level, professional experience, duration of work in the ICUs and clinics, weekly working hours during the pandemic, training received on the care of the patient with COVID-19 infection, and individualized care provided during the pandemic.

**Individualized Care Scale (ICS):** It was developed by Suhonen et al. (2005) to evaluate the views of patients and nurses about individualized care in a health care environment<sup>4</sup>. It consists of separate items for patients and nurses. The patient version of the scale is a bi-partite scale that evaluates patients' awareness of nursing interventions aimed at supporting the individuality of the patient during hospitalization (ICS-A) and the patients' perceptions of individuality in their care (ICS-B). The nurse version of the scale evaluates nurses' perceptions of supporting the patient's individuality in care practices (ICS-A-Nurse) and perceptions of individualizing patients' care (ICS-B-Nurse). In this study, ICS-B scales were used because it was aimed to examine patients' perception of individuality in

their care and nurses' perceptions of individualizing patients' care. The patient version of ICS-B scale was adapted to the Turkish population by Acaroglu et al. (2010), and the nurse version was adapted to the Turkish population by Şendir et al. (2010)<sup>14,15</sup>. Both scales are 5-point Likert scales with 17 questions (1=strongly disagree; 5=strongly agree). Both scales have three sub-scales: "clinical situation", "personal life situation" and "decisional control over care". Scale scores are calculated by dividing the sum of points of all items by the number of the items. Therefore, the lowest score that can be obtained from the scales is 1, and the highest score is 5. In this study, Cronbach's alpha coefficients were found to be 0.939 and 0.814 for ICS-B and ICS-B-Nurse.

### Research Questions

How are the individualized care perceptions of patients in the Covid-19 pandemic?

How are the individualized care perceptions of nurses in the Covid-19 pandemic?

Is there a difference between the individualized care perceptions of patients and nurses in the Covid-19 pandemic?

### Research Variables

**Dependent Variables:** Individualized care perceptions of patients and nurses in the Covid-19 pandemic.

**Independent Variables:** Individual characteristics of patients and nurses.

**Table 2: Demographic Characteristics of the Nurses**

		n	%	Results
<b>Gender</b>	Female	135	87.7	The demographic characteristics of the patients are shown in Table 1. The mean age of the patients was $53.11 \pm 13.86$ years and 57.3% (n=122) were male, 64.3% (n=137) stated that they believed they received individualized nursing care while in hospital. The demographic characteristics of the nurses are shown in Table 2. The mean age of the nurses was $33.86 \pm 8.47$ years, 98.1% (n=151) believed that providing individualized care was beneficial, 66.2% (n=102) thought that the facilities were insufficient to provide individualized care during the pandemic, and only 45.5% (n=70) of the nurses indicated that they were able to provide individualized care to the patients during the pandemic.
	Male	19	12.3	
<b>Marital status</b>	Married	74	48.1	The ICS-B and ICS-B-Nurse total and subscale mean scores of the patients and nurses and the relationship between them are shown in Table 3. The patients and nurses' ICS-B and ICS-B-Nurse scores were $4.02 \pm 0.9$ (min:1.25, max:5.0) and $4.15 \pm 0.44$ (min:2.82, max:5.0) points, respectively. No statistically significant difference was found between patients' and nurses' ICS-B total score and personal life situation and decisional control over care subscales while there was a statistically significant difference between clinical situation subscale of patients and nurses ( $t=-3.298$ ; $p<0.05$ ). ICS-B-Nurse clinical situation subscale mean scores of the nurses were found to be higher than the mean scores of the patients.
	Single	80	51.9	
<b>Educational level</b>	Medical-Vocational High School	19	12.3	When the relationship between some characteristics of the patients and ICS-B total score and subscales was examined, a statistically significant relationship was found between marital status and ICS-B total score and all subscales ( $t=3.234$ , $t=2.878$ , $t=2.848$ , $t=2.195$ , $p<0.05$ ), between the presence of health insurance and the total score and personal life situation and decisional control subscales ( $t=-3.551$ , $t=-4.064$ , $t=-2.929$ , $p<0.05$ ), between individualized care perceptions during the hospital stay and the total score and all subscales ( $t=5.608$ , $t=5.595$ , $t=5.717$ , $t=4.111$ , $p<0.05$ ), and between the place of residence and the total score and all subscales ( $F=8.087$ , $F=11.900$ , $F=5.052$ , $F=5.840$ , $p<0.05$ ) (Table 4). ICS-B scores of the patients who were married, did not have health insurance, believed that they received individualized care while in hospital, and lived with their families were found to be statistically significantly higher. In addition, there was a statistically significant positive weak correlation between the age of the patients and ICS-B total score and clinical situation and personal life situation subscales, and the scale scores increased along with the age of the patients ( $r=0.165$ , $r=0.175$ , $r=0.198$ , $p<0.05$ ).
	Bachelor's Degree	79	51.3	
	Postgraduate Diploma	53	34.4	
	Unspecified	3	1.9	
<b>Training received on the care of the patient with COVID-19 infection</b>	Yes	66	42.9	When the relationship between some characteristics of the nurses and ICS-B total score and subscales was examined, no significant relationship was found between the age, professional experience, duration of work in Covid-19 clinics, and weekly working hours during the pandemic ( $t=-0.123$ , $t=-0.056$ , $t=-0.089$ , $t=-0.045$ , $p>0.05$ ).
	No	88	57.1	
<b>The view that providing individualized care is beneficial</b>	Yes	151	98.1	The ICS-B and ICS-B-Nurse total and subscale mean scores of the patients and nurses and the relationship between them are shown in Table 3. The patients and nurses' ICS-B and ICS-B-Nurse scores were $4.02 \pm 0.9$ (min:1.25, max:5.0) and $4.15 \pm 0.44$ (min:2.82, max:5.0) points, respectively. No statistically significant difference was found between patients' and nurses' ICS-B total score and personal life situation and decisional control over care subscales while there was a statistically significant difference between clinical situation subscale of patients and nurses ( $t=-3.298$ ; $p<0.05$ ). ICS-B-Nurse clinical situation subscale mean scores of the nurses were found to be higher than the mean scores of the patients.
	No	3	1.9	
<b>The adequacy of the facilities to provide individualized care during the pandemic</b>	Sufficient	52	33.8	The ICS-B and ICS-B-Nurse total and subscale mean scores of the patients and nurses and the relationship between them are shown in Table 3. The patients and nurses' ICS-B and ICS-B-Nurse scores were $4.02 \pm 0.9$ (min:1.25, max:5.0) and $4.15 \pm 0.44$ (min:2.82, max:5.0) points, respectively. No statistically significant difference was found between patients' and nurses' ICS-B total score and personal life situation and decisional control over care subscales while there was a statistically significant difference between clinical situation subscale of patients and nurses ( $t=-3.298$ ; $p<0.05$ ). ICS-B-Nurse clinical situation subscale mean scores of the nurses were found to be higher than the mean scores of the patients.
	Insufficient	102	66.2	
<b>The ability to provide individualized care to patients during the pandemic</b>	Yes	70	45.5	When the relationship between some characteristics of the patients and ICS-B total score and subscales was examined, a statistically significant relationship was found between marital status and ICS-B total score and all subscales ( $t=3.234$ , $t=2.878$ , $t=2.848$ , $t=2.195$ , $p<0.05$ ), between the presence of health insurance and the total score and personal life situation and decisional control subscales ( $t=-3.551$ , $t=-4.064$ , $t=-2.929$ , $p<0.05$ ), between individualized care perceptions during the hospital stay and the total score and all subscales ( $t=5.608$ , $t=5.595$ , $t=5.717$ , $t=4.111$ , $p<0.05$ ), and between the place of residence and the total score and all subscales ( $F=8.087$ , $F=11.900$ , $F=5.052$ , $F=5.840$ , $p<0.05$ ) (Table 4). ICS-B scores of the patients who were married, did not have health insurance, believed that they received individualized care while in hospital, and lived with their families were found to be statistically significantly higher. In addition, there was a statistically significant positive weak correlation between the age of the patients and ICS-B total score and clinical situation and personal life situation subscales, and the scale scores increased along with the age of the patients ( $r=0.165$ , $r=0.175$ , $r=0.198$ , $p<0.05$ ).
	No	84	54.5	
	<b>Mean±SD</b>	<b>Min</b>	<b>Max</b>	
<b>Age</b>	$33.86 \pm 8.47$	20	53	
<b>Professional experience</b>	$13.47 \pm 9.34$	0	32	
<b>Duration of work in Covid intensive care unit</b>	$3.53 \pm 10.51$	0	84	
<b>Duration of work in Covid clinics</b>	$5.38 \pm 3.34$	0	12	
<b>Weekly working hours during the pandemic</b>	$47.44 \pm 12.60$	0	80	

### Data Analysis

In the study, data analysis was performed with the SPSS 21.0 program. In the evaluation of the data, number and percentage were used for categorical variables, mean $\pm$ standard deviation, minimum and maximum values were used for continuous variables. Conformity of continuous variables to normal distribution was assessed with the Kolmogorov-Smirnov test. The Student's t-test was used for the comparisons of continuous variables between two groups, One-Way ANOVA test was used for the comparisons of multiple groups. In One-Way ANOVA, if there was a significant difference between the groups, the Scheffé test in Post-Hoc (multiple comparison) method was applied to determine which group the difference originated from. The power of the correlation coefficient is indicated by  $r$ . The correlation values were evaluated as 0-0.2=very weak, 0.2-0.4=weak, 0.4-0.6=moderate and 0.6-0.8=strong.  $p<0.05$  level was considered statistically significant.

### Ethical Approval

Ethics committee approval (11.12.2020/16-06) from the university ethics committee and institutional permission from the hospital were obtained. Nurses and patients were informed about the aim and content of the study and their verbal consent was obtained. The study was conducted in accordance with the Declaration of Helsinki.

The ICS-B and ICS-B-Nurse total and subscale mean scores of the patients and nurses and the relationship between them are shown in Table 3. The patients and nurses' ICS-B and ICS-B-Nurse scores were  $4.02 \pm 0.9$  (min:1.25, max:5.0) and  $4.15 \pm 0.44$  (min:2.82, max:5.0) points, respectively. No statistically significant difference was found between patients' and nurses' ICS-B total score and personal life situation and decisional control over care subscales while there was a statistically significant difference between clinical situation subscale of patients and nurses ( $t=-3.298$ ;  $p<0.05$ ). ICS-B-Nurse clinical situation subscale mean scores of the nurses were found to be higher than the mean scores of the patients.

When the relationship between some characteristics of the patients and ICS-B total score and subscales was examined, a statistically significant relationship was found between marital status and ICS-B total score and all subscales ( $t=3.234$ ,  $t=2.878$ ,  $t=2.848$ ,  $t=2.195$ ,  $p<0.05$ ), between the presence of health insurance and the total score and personal life situation and decisional control subscales ( $t=-3.551$ ,  $t=-4.064$ ,  $t=-2.929$ ,  $p<0.05$ ), between individualized care perceptions during the hospital stay and the total score and all subscales ( $t=5.608$ ,  $t=5.595$ ,  $t=5.717$ ,  $t=4.111$ ,  $p<0.05$ ), and between the place of residence and the total score and all subscales ( $F=8.087$ ,  $F=11.900$ ,  $F=5.052$ ,  $F=5.840$ ,  $p<0.05$ ) (Table 4). ICS-B scores of the patients who were married, did not have health insurance, believed that they received individualized care while in hospital, and lived with their families were found to be statistically significantly higher. In addition, there was a statistically significant positive weak correlation between the age of the patients and ICS-B total score and clinical situation and personal life situation subscales, and the scale scores increased along with the age of the patients ( $r=0.165$ ,  $r=0.175$ ,  $r=0.198$ ,  $p<0.05$ ).

When the relationship between some characteristics of the nurses and ICS-B total score and subscales was examined, no significant relationship was found between the age, professional experience, duration of work in Covid-19 clinics, and weekly working hours during the pandemic ( $t=-0.123$ ,  $t=-0.056$ ,  $t=-0.089$ ,  $t=-0.045$ ,  $p>0.05$ ).

**Table 3: Patients' and Nurses' Individualized Care Scale Mean Scores and Their Relationship**

	Patients			Nurses			
	Mean±SD	Min	Max	Mean±SD	Min	Max	t p
<b>Individualized Care Scale</b>	4.02±0.93	1.25	5.00	4.15±0.44	2.82	5.0	-1.757 0.080
<b>Clinical situation</b>	4.14±0.98	1.67	5.00	4.42±0.45	3.29	5.0	<b>-3.298</b> <b>0.001*</b>
<b>Personal life situation</b>	3.54±1.18	1.00	5.00	3.70±0.78	1.25	5.0	-1.574 0.116
<b>Decisional control over care</b>	4.23±0.91	1.00	5.00	4.14±0.54	2.50	5.0	1.201 0.231

t: Independent Sample T-Test, \*p&lt;0.05

**Table 4. The Relationship Between Some Demographic Characteristics of The Patients and Individualized Care Scale Scores**

		Individualized Care Scale		Clinical situation		Personal life situation		Decisional control over care		
		Mean±SD	t p	Mean±SD	t p	Mean±SD	t p	Mean±SD	t p	
<b>Gender</b>	Female	3.99±0.90	-0.390 0.697	4.10±0.95 4.17±1.01	-0.467 0.641	3.51±1.15 3.56±1.20	-0.291 0.772	4.21±0.88 4.25±0.94	-0.302 0.763	
	Male	4.04±0.95								
<b>Marital status</b>	Married	4.12±0.87	3.234 0.001*	4.24±0.92 3.66±1.14	2.878 0.006*	3.65±1.13 3.00±1.27	2.848 0.002*	4.30±0.87 3.89±1.06	2.198 0.033*	
	Single	3.58±1.06								
<b>Employment status</b>	Employed	4.05±0.82	0.392 0.695	4.18±0.89 4.10±1.07	0.555 0.580	3.49±1.12 3.58±1.24	-0.537 0.592	4.29±0.77 4.17±1.04	0.926 0.356	
	Unemployed	4.00±1.02								
<b>Health insurance</b>	Yes	4.00±0.93	-3.551 0.005*	4.12±0.99 4.64±0.52	-0.567 0.119	3.49±1.18 4.50±0.69	-4.064 0.002*	4.21±0.93 4.66±0.41	-2.929 0.013*	
	No	4.61±0.48								
<b>History of hospitalization</b>	Yes	4.05±0.99	0.508 0.612	4.17±1.02 4.08±0.91	0.607 0.544	3.61±1.23 3.96±1.07	1.315 0.190	4.21±1.05 4.27±0.73	-0.445 0.657	
	No	3.98±0.79								
<b>Individualized nursing care perception during the hospital stay</b>	Yes	4.27±0.74	5.608 0.001*	4.40±0.75 3.66±1.16	5.595 0.001*	3.86±1.01 2.96±1.25	5.717 0.001*	4.42±0.78 3.90±1.03	4.111 0.001*	
	No	3.57±1.060								
		Mean±SD	F p	Mean±SD	F p	Mean±SD	F p	Mean±SD	F p	
<b>Educational Level</b>	Primary Education	4.05±0.98	0.391 0.759	4.15±1.01 4.03±0.99	0.716 0.543	3.59±1.26 3.45±1.17	0.153 0.928	4.26±0.99 4.20±0.76	0.611 0.608	
	Associate's Degree	3.95±0.88		4.06±1.07		3.52±1.13		4.12±1.00		
	Bachelor's Degree	3.95±0.98		4.34±0.73		3.47±1.04		4.39±0.63		
	Postgraduate Diploma	4.14±0.69								
<b>Place of Residence</b>	Living with family	4.13±0.83	8.087 0.001*	4.27±0.87 3.53±1.21	11.900 0.001*	3.64±1.11 2.79±1.35	5.052 0.007*	4.33±0.82 3.76±1.14	5.840 0.003*	
	Living alone	3.43±1.14		3.04±1.26		3.53±1.39		3.64±1.34		
	Other	3.39±1.22								
		r	p	r	p	r	p	r	p	
<b>Age</b>			0.165	0.016*	0.175	0.011*	0.198	0.004*	0.087	0.205

t: Independent Sample T-Test, F: One-Way ANOVA, \*p&lt;0.05

**Table 5. The Relationship Between Some Demographic Characteristics of The Nurses and Individualized Care Scale Scores**

		Individualized Care Scale		Clinical situation		Personal life situation		Decisional control over care	
		Mean±SD	t p	Mean±SD	t p	Mean±SD	t p	Mean±SD	t p
<b>Gender</b>	Female	4.18±0.45	<b>3.275</b>	4.46±0.43	<b>2.993</b>	3.70±0.78	0.188	4.18±0.56	<b>4.185</b>
	Male	3.93±0.29	<b>0.003*</b>	4.14±0.49	<b>0.003*</b>	3.67±0.81	0.851	3.85±0.26	<b>0.001*</b>
<b>Marital Status</b>	Married	4.18±0.43	0.792	4.44±0.46	0.556	3.85±0.67	<b>2.309</b>	4.10±0.51	-0.876
	Single	4.12±0.45	0.430	4.40±0.43	0.579	3.56±0.85	<b>0.022*</b>	4.18±0.57	0.383
<b>Training received on the care of the patient with COVID-19 infection</b>	Yes	4.13±0.47	-0.620	4.32±0.45	<b>-2.407</b>	3.73±0.84	0.488	4.16±0.54	0.394
	No	4.17±0.41	0.536	4.50±0.44	<b>0.017*</b>	3.67±0.73	0.626	4.12±0.55	0.694
<b>The view that providing individualized care is beneficial</b>	Yes	4.16±0.44	0.773	4.42±0.45	0.176	3.71±0.78	1.385	4.14±0.55	0.281
	No	3.96±0.12	0.441	4.38±0.45	0.860	3.08±0.76	0.168	4.05±0.25	0.779
<b>The adequacy of the facilities to provide individualized care during the pandemic</b>	Sufficient	4.08±0.42	-1.396	4.24±0.48	<b>-3.557</b>	3.90±0.62	<b>2.524</b>	4.02±0.49	-1.872
	Insufficient	4.19±0.44	0.165	4.52±0.40	<b>0.001*</b>	3.60±0.83	<b>0.013*</b>	4.20±0.56	0.063
<b>The ability to provide individualized care to patients during the pandemic</b>	Yes	4.19±0.40	1.068	4.38±0.47	-0.923	3.93±0.56	<b>3.538</b>	4.14±0.49	0.076
	No	4.12±0.47	0.287	4.45±0.42	0.357	3.50±0.88	<b>0.001*</b>	4.14±0.59	0.940
<b>patients during the pandemic</b>									
		Mean±SD	F p	Mean±SD	F p	Mean±SD	F p	Mean±SD	F p
<b>Educational Level</b>	Medical-Vocational High School	3.98±0.37	2.305	4.15±0.54	4.491	3.65±0.77	1.176	4.00±0.40	0.709
	Bachelor's Degree	4.14±0.48	0.103	4.43±0.46		3.63±0.82	0.311	4.15±0.60	0.494
	Postgraduate Diploma	4.23±0.39		4.51±0.38		3.84±0.71		4.16±0.50	
		r	p	r	p	r	p	r	p
<b>Age</b>		0.106	0.191	0.155	0.055	0.065	0.422	0.031	0.706
<b>Professional Experience</b>		0.108	0.208	0.134	0.118	0.055	0.520	0.065	0.449
<b>Duration of work in Covid intensive care unit</b>		-0.107	0.395	-0.182	0.146	0.087	0.491	-0.148	0.240
<b>Duration of work in Covid clinical unit</b>		-0.162	0.113	-0.192	0.060	0.036	0.724	-0.223	-0.162
<b>Weekly working hours during the pandemic</b>		0.053	0.544	0.094	0.279	0.020	0.821	0.011	0.902

**t:** Independent Sample T-Test, **F:** One-Way ANOVA, \*p<0.05

clinics and ICUs, weekly working hours during the pandemic, and the ICS-B-Nurse total score and subscales. There was a statistically significant relationship between the gender of the nurses and the total score and clinical situation and decisional control over care subscales ( $t=3.275$ ,  $t=2.993$ ,  $t=4.185$ ,  $p<0.05$ ), between marital status and personal life situation subscale ( $t=2.309$ ,  $p<0.05$ ), between the training received on the care of a Covid-19 patient and clinical situation subscale ( $t=-2.407$ ), between the adequacy of the facilities to provide individualized care during the pandemic and clinical situation and personal life situation subscales ( $t=-3.557$ ,  $t=2.524$ ,  $p<0.05$ ), between the ability to provide

individualized care and personal life situation subscale ( $t=3.538$ ,  $p<0.05$ ), and between the educational level and the clinical situation subscale ( $F=4.491$ ,  $p<0.05$ ) (Table 5).

## Discussion

Expressions of personalized or individualized care are used to define nurses' understanding of the patient's values in patient care and maintaining it. Individualized care is the integration of nursing care practices with the belief that each individual should be treated as unique and whole<sup>16</sup>. In individualized nursing care, the focus is on the patient due to the individual differences of the patients<sup>17</sup>. In recent years, it has been stated in the literature that it is necessary to evaluate <https://dx.doi.org/10.4314/mmj.v37i3.3>

individualized nursing care by patients and nurses together<sup>6</sup>. Due to the high rate of transmission, Covid-19 disease is an obstacle for both patients to receive individualized care and nurses to provide individualized care. In this regard, this study was carried out to determine the individualized care perceptions of patients and nurses in the Covid-19 pandemic.

In this study, 64.3% (n=137) of the patients who hospitalized due to Covid-19 believed that they received individualized nursing care (Table 1). In a study conducted on the individualized care perceptions of patients, 90.4% of the patients reported that nurses provided one-on-one care during their hospital stay, 98.7% indicated that it was important for nurses to provide one-on-one care, and 88.3% stated that they found nursing care adequate<sup>19</sup>. Patients hospitalized due to Covid-19 are isolated due to the high transmission rate of the disease and are left alone due to the absence of visitors. Nursing care interventions, on the other hand, required nurses to be with the patient for a limited period of time to protect themselves and minimize the risk of contact. So, this may have affected patients' perceptions of individualized care during their stay in the hospital.

In this study, 98.1% (n=151) of the nurses believed that providing individualized care was beneficial, 66.2% (n=102) thought that the facilities were insufficient to provide individualized care during the pandemic, and only 45.5% (n=70) of the nurses indicated that they were able to provide individualized care during the pandemic (Table 2). Karayurt et al. reported that 78.9% of the nurses believed that the facilities offered to provide individualized care in the hospital were insufficient, 94.5% of the nurses found individualized care important and 46.5% indicated that they provided individualized care<sup>6</sup>. Moreover, they emphasized that one of the biggest barriers for nurses to providing individualized care is the time spent on indirect care practices such as drug/material supply, answering the phone, and filling out forms. In a study examining intern nursing students' views about individualized care, it was reported that 96.9% of the nursing students believed that individualized care was necessary for nursing care<sup>19</sup>. The necessity of personal protective measures with the pandemic has been added to the current workload, causing nurses to spend less time with patients. Although nurses are aware of the importance of individualized care in nursing care quality, they may not be able to provide individualized care adequately due to reasons such as the workload that comes with the pandemic, long working hours, the desire to remain in the patient's room as short of time as possible because they have to protect themselves, the lack of facilities and the time spent on indirect care practices.

The total mean scores of the patients and nurses obtained from ICS-B and ICS-B-Nurse were  $4.02 \pm 0.93$  and  $4.15 \pm 0.44$  points, respectively (Table 3). Regarding the fact that the highest item total mean score that can be obtained from ICS-B and ICS-B-Nurse is 5.0, it can be stated that the individualized care perceptions of nurses and patients were quite high considering the pandemic conditions. In the studies that assessed individualized care perceptions of patients with the same scale, radiation oncology patients' individualized care perception was found as  $4.44 \pm 0.74$  in the study of Rose et al.; orthopaedic surgery patients' individualized care perception was  $4.26 \pm 0.07$  in the study of Tekin and Findik; diabetic patients' individualized care perception was reported as  $3.58 \pm 8.71$  in the study of Bartkeviciute et al.<sup>20,21,22</sup>. The fact

that the scale total mean scores of the patients in this study were lower than the other studies may have resulted from the care received under pandemic conditions. When the scale subscales of the patients were examined, decisional control over care, clinical situation, and personal life situation were ordered from the highest to the lowest, respectively. This result is similar to the results obtained from the studies of Rose et al. and Bartkeviciute et al.<sup>20,22</sup>. This shows that by supporting their individuality, patients can participate in their care and be involved in decisions to be made.

In the studies that assessed individualized care perceptions of the nurses, it was found as  $4.08 \pm 0.54$  in the study of Bartkeviciute et al.;  $4.05 \pm 0.50$  in the study of Charalambous et al.;  $4.10 \pm 0.53$  in the study of Suhonen et al.;  $4.57 \pm 0.33$  in the study of Rose et al.;  $3.93 \pm 0.77$  in the study of Karayurt et al.<sup>22,23,24,25</sup>. Individualized care perception of the intern nursing students was reported as  $3.83 \pm 0.94$  in the study of Bağrı et al.<sup>19</sup>. In this study, nurses' scale total mean scores were found to be average regarding other studies. It is believed that this difference resulted from the fact that nurses provided care under difficult conditions such as the pandemic. When the scale subscales of nurses were examined, clinical situation, decisional control over care, and personal life situation were ordered from the highest to the lowest, respectively. This result is similar to the results obtained from the studies of Karayurt et al. and Bartkeviciute et al.<sup>22,25</sup>. This may be related to the fact that individualized care for the patient's clinical condition and decisional control in the treatment and care is at the forefront of providing nursing care due to the ongoing uncertainties in the treatment and care process of Covid-19 patients.

In this study, no statistically significant difference was found between patients' and nurses' ICS-B total score and personal life situation and decisional control over care subscales while there was a statistically significant difference between clinical situation subscale of patients and nurses (Table 3). When studies were examined, it was reported that there were differences between the individualized care perceptions of patients and nurses<sup>20</sup>. Bartkeviciute et al. compared the individualized care perceptions of diabetic patients and healthcare professionals providing care and reported that there was a significant difference between the total score and clinical situation and personal life situation subscales, but there was no significant difference between the decisional control over care subscale<sup>22</sup>. The lack of difference between patients and nurses in terms of individualized care perceptions in this study shows that the individuality of the nursing care provided was perceived in the same way by both patients and nurses. The fact that nurses and patients have similar individualized care perceptions under difficult conditions can be explained by the fact that nurses tried to provide quality nursing care even in pandemic conditions. The significant difference between the patients and nurses only in the clinical situation subscale and the higher scores of the nurses may have resulted from the uncertainties in the treatment and care process of Covid-19 patients and the need to quickly intervene in the changes that may occur in patients' condition.

In this study, ICS-B scores of the patients who were married, did not have health insurance, believed that they received individualized care while in hospital, and lived with their families were found to be statistically significantly higher (Table 4). Considering that patients who are married, live

with their families, and believe in the individuality of care may have more roles and responsibilities, it can be stated that they believe they can recover more quickly with individualized care, which is an indicator of quality care, and they are more willing in this regard. The fact that patients believed they received individualized care suggests that the quality and satisfaction levels of the nursing care they received were high. Although we do not have an explanation for the higher perception of individualized care in patients without health insurance, we believe that the relationship between health insurance and individualized care can be explained in further mixed-method studies. In this study, it was also determined that ICS-B total scores and clinical situation and personal life situation subscale scores of the patients increased along with the age. There are studies in the literature reporting that advanced age is associated with a higher perception of individualized care or not<sup>22,24,26</sup>. Elderly patients are more tolerant, more respectful to healthcare professionals, and more accepting of what has happened in the process. Stolt et al. stated that elderly patients' perceptions of individualized care are related to the patient-centred care environment. In this study, the higher perception of individualized care in elderly patients can be explained by the fact that they received care under difficult conditions caused by the pandemic and that they understood and respected the difficult working conditions of healthcare professionals by empathizing with them<sup>27</sup>.

It was determined that there was no significant relationship between the age, professional experience, duration of work in Covid-19 clinics and ICUs, weekly working hours during the pandemic, and ICS-B-Nurse total and subscale scores of nurses (Table 5). There are studies in the literature reporting that the age groups of nurses affect and not affect the individualized care perceptions, and it is believed that this situation results from different sample groups. Studies proved that years of working in the profession bring experience and that experience is effective on individualized care<sup>20,27</sup>. Rose stated that nurses with more than 20 years of professional experience had higher personal life subscale scores<sup>20</sup>. The fact that the mean years of professional experience of the nurses participating in this study was low and they experienced a pandemic for the first time might have caused the absence of a significant relationship although they supported individualizing patients' care. As in this study, it was reported that the weekly working hours of nurses did not affect the individualized care perceptions<sup>28</sup>.

It was determined that the majority of the nurses participating in this study were women (87.7%), and the ICS-B-Nurse total and all subscale scores of the female nurses were found to be higher than male nurses. In the studies no significant relationship was found between the gender of the nurses and individualized care<sup>7,10,24,28</sup>. The high number of female nurses participating in this study may have contributed to this difference. In addition, it is assumed that the high number of women in the nursing profession in the country where the study was conducted and the roles attributed to women may have affected this result.

In this study, it was observed that those who did not receive training on the care of patients with Covid-19 infection had a higher score in ICS-B-Nurse clinical situation subscale. Nurses participate alternately in in-service training planned in the pandemic. In some cases, nurses who did not receive training yet were also assigned to pandemic services as an

emergency while nurses who cared for Covid-19 patients in the first stage themselves were quarantined after being infected with the disease or were rotated to rest for a while. Nurses who were assigned as an emergency may have been inclined to obtain individual information about the care of Covid-19 patients and it may have resulted in higher scores obtained from the clinical care subscale. Nurses should increase their continuous learning capacity by recognizing the value of the profession well and should catch up with the changes by being aware of the social changes that occur. For this, it is necessary to ensure that nurses develop knowledge, attitude, and behaviour changes with continuous education. In this way, individualized care practices provided by nurses will positively affect the increase in the satisfaction and quality of life of patients<sup>29,30</sup>.

It was observed that clinical situation and personal life subscale scores of the nurses who believed that the facilities were insufficient to provide individualized care during the pandemic, and the personal life score of the nurses who stated that they were able to provide individualized care to the patients during the pandemic were found to be higher. Nursing care, which is provided according to patients' individual needs in a positive professional practice environment, is one of the most important aspects in providing individualized care<sup>31</sup>. The fact that the healthcare practice environment mainly contained insufficient human resources even before the pandemic became more evident with the challenges posed by the pandemic. Despite the challenges posed by the pandemic, maintaining individualized care can be achieved by developing a professional care environment with teamwork. The higher scores of nurses who believed that the facilities to provide individualized care were insufficient during the pandemic reflect their efforts to provide the best nursing care even in extraordinary situations where they were needed.

Educational level is associated with individualized care skill<sup>20,25</sup>. In this study, it was determined that ICS-B-Nurse clinical situation subscale score of the nurses with a postgraduate level was higher than the others. In their study examining the relationship between nurses' sociodemographic characteristics and individualized care, Idvall et al. and Bartkeviciute et al. reported that educational level and professional experience affect individualized care<sup>22,28</sup>. It was emphasized that since the majority of the nurses constituting the study group of Karayurt et al. had an educational level below the undergraduate degree, not enough attention may have been paid to the importance of individualized care in nursing education and the communication techniques and professionalism that affect it<sup>25</sup>. Undergraduate and postgraduate education increases communication skills and professionalism, enabling nurses to provide better quality care to patients<sup>32,33</sup>. Moreover, postgraduate education and professional experience support individualized care<sup>28,34</sup>. This may lead to an increase in nurses' care perceptions. Higher ICS-B scores of the nurses with a postgraduate degree in this study may be due to the fact that more attention was paid to individualized and holistic care, especially in postgraduate education.

## Limitation

This study has some limitations. It was made with patients hospitalized due to Covid-19 and nurses who care for them in a training and research hospital. The results of this study are valid only for the population included in the study.

## Conclusion

One of the most important parameters that positively affect the quality of patient care is individualized nursing care. In this study, although nurses' individualized care perceptions were found to be higher than patients' individualized care perceptions, no statistically significant difference was found between them. It can be stated that the individualized care perceptions of nurses and patients were quite high considering the pandemic conditions. Due to the isolation, the pandemic process is a period when patients need nursing care more than ever. It is recommended to improve the working conditions of nurses working in pandemic clinics and intensive care units, to identify and remove the obstacles for nurses to provide individualized care, to offer facilities supporting individualized care, and to encourage nurses to participate in scientific programs for individualized care practices.

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