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Article

The Correlation between Nurses' Job Stress, Satisfaction, and Caring Behaviors Perception during the Covid-19 Pandemic

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Abstract: Introduction: Nurses, at the forefront of the fight against the Covid-19 pandemic, have a significant responsibility. Thus, it is substantial to examine the factors behind the job stress, job satisfaction, and the care nurses provide in this process. To examine the correlation between nurses' job stress, satisfaction, and caring behavior perceptions during the Covid-19 pandemic. Method: A descriptive and correlational study. It was conducted with 261 nurses working in a hospital between 2020-2021. Introductory information form, Job Satisfaction Scale for Nurses, Swedish Demand-Control-Support Questionnaire (Job Stress Scale) and Caring Behaviors Inventory-24 were used as data collection tools. Factors behind the perception of caring behaviors were analyzed by linear regression analysis. Results: Caring behavior was found negatively correlated with job stress and positively correlates with job satisfaction. The regression analysis showed that the evaluation of the pre-pandemic work environment and the sub-dimensions of the scales, job control, support from superiors, and perceived significance in the workplace affected the caring behavior. Conclusion: The nurses have low job stress, high job satisfaction, and a high perception of caring behavior in the fight against Covid-19.

Keywords: caring behavior; Covid-19 pandemic; nurse; job satisfaction; job stress

1. Introduction

Covid-19 infection has been reported to the world through cases of viral pneumonia with unknown causes in Wuhan city, Hubei province of China [30,50] Since the infection spread rapidly and caused thousands of deaths, a pandemic was declared by the WHO on March 11, 2020, and *a major international public health emergency''* was initiated [46]. Health professionals working in crises such as pandemics have been affected by this process both physically and psychosocially and nurses, who comprise the largest share with 59%, are leading the fight against the pandemic and undertaking 90% of care, have demonstrated extraordinary courage, compassion, competence, and leadership skills during the pandemic [11,47]. They had substantial responsibilities at the forefront in the Covid-19 pandemic and encountered the infected patients the most, spending the longest time with them [4]. Nurses were needed for their counseling, educators, prevention, and control of infections roles, and care which is their primary responsibility, even more in this process [41,47]. They also need to protect their health in the pandemic to fulfill their responsibilities towards patients and society. ICN reported that 51% of the nurses in America were overwhelmed, 93% experienced stress, 76% experienced fatigue and burnout, 60% of the nurses in China experienced fatigue, and 90% were anxious and reported daily symptoms of depression and more than 40% of nurses in Israel were afraid to care for Covid-19 patients during the pandemic [12]. The ICN research, 80% of nurses have been exposed to mental health problems, burnout, depression, post-traumatic stress disorder, and Covid-19-related violence [11]. If health institutions do not support nurses against these problems, the workforce dwindles, and the quality of care is negatively affected [5,8].

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Care, defined as the unity of human values and the essence of all nursing services, is the only concept that did not change in the nursing profession. Nurses, who are the backbone of the health system, the problems they encountered in the working environment during the pandemic process increased their stress levels, while issues such as physical fatigue, loss of social support, low work performance, anxiety, stress, burnout, and sleep disorders were observed [25,29,33,39]. It has been stated that factors such as the fear of getting infected and infecting others, the uncertainty that whether the institution they work for will support their personal and family needs, lack of time for recovery, lack of up-to-date information, and the stress level that is not intervened affect the work performance of the nurses who care for Covid-19 patients and causes job dissatisfaction and burnout [10,23,35,39].

Pourteimour et al. (2021) found that workload, one of the factors affecting the work stress of nurses during the Covid-19 pandemic, negatively affects work performance and care behavior, Nia et al. (2021) stated a positive correlation between job care and satisfaction [31,28]. A cross-sectional study revealed that supervision, conditional rewards, colleagues, the nature of work, and communication were positively related to caring behavior [32]. Although there are studies are examining the work stress of nurses during the pandemic [22,25,34], job satisfaction [21,36,38] and caring behaviors [2,24,28,39], no study yet examined these factors collectively. This aims to determine the nurses' perception of job stress, satisfaction, and caring behaviors during the Covid-19 pandemic, examine the correlation between job stress and satisfaction and the perception of care behaviors, and examine the determinants of the perception of care behaviors.

2. Materials and Methods

2.1. Aim(s)

The aim of the study is to determine the levels of nurses' perception of job stress, job satisfaction and care behaviors during the Covid-19 pandemic process, to examine the relationship between job stress and job satisfaction and the perception of care behaviors, and to examine the determinants of the perception of care behaviors.

2.2. Design

A descriptive and correlational study.

2.2.1. Participants

This research was carried out with nurses working in a training-research hospital between 04.11.20-29.07.21. Free Statistics Calculators version 4.0 was used for the sample size of the study. In the calculation, the sample size for the multiple regression analysis with 26 variables was found to be 247, taking the medium effect size (d=15), 5% margin of error (α=0.05), and 95% power (1- β=0.95). It was aimed to reach at least 247 nurses during the data collection process [43,44]. The criteria for inclusion in the study are to work as a nurse for at least 3 months and to continue working during the pandemic period. At the end of the data collection process, the study was completed with 261 nurses.

2.3. Data collection

The research data were collected by face-to-face and online survey method between 08.12.2020 and 16.02.2021. All nurses working in the hospital where the research was conducted were given an equal chance. The research data were collected face-to-face from the nurses who could be reached within the hospital in time periods that did not affect the working process. The research data of many nurses who could not be reached due to the pandemic were communicated to all nurses working by communicating with each clinical responsible nurse via an online questionnaire (Google forms) and they were asked to fill in voluntarily.

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2.3.1. Data collection tools

Introductory Information Form

There were questions about nurses' socio-demographic and working characteristics before and after the pandemic and their life experiences regarding the pandemic process.

Swedish Demand-Control-Support Questionnaire (Job Stress Scale)

The Turkish validity and reliability tests of the scale, which was developed by Karasek et al. in 2000, were performed by Demiral et al. (2007) [6]. It consists of 17 items and 3 sub-dimensions, the 4th and 9th items are scored in the opposite direction and evaluated with a 4-point Likert system. In the study, the Cronbach's alpha value of the scale was found to be 0.63. Sub-dimension total score (1-4) was obtained by summing item scores. The work stress score is obtained by dividing the workload score by the work control score. An increase in the job stress score indicates high stress levels, while a decrease indicates low stress.

Job Satisfaction Scale for Nurses

Muya et al. Turkish validity and reliability of the scale developed by (2014), conducted in Japan by Türe Yılmaz and Yıldırım (2016). The original scale consists of 28 items and 4 sub-dimensions. Since the t value of the 4th item was not significant in the confirmatory factor analysis performed in the Turkish form, it was removed from the scale and 27 items and 4 sub-dimensions were accepted. After the validity and reliability tests of the items of the scale, the 6th and 20th items were scored with a reverse and 5-point Likert system according to the final version of the scale. The total score was found by summing the item scores of the scale and dividing by 27. When the total score approaches 5, job satisfaction is higher, and when it decreases towards 1, it shows the opposite [26,45]. In this test, the Cronbach's alpha value of the scale was found to be 0.86.

Caring Behaviors Inventory-24

The scale developed by Wu et al. (2006) is the short form of the 42-item "CBI-42" developed by Wolf et al. (2006) and is designed to evaluate the nursing care process [49,46]. Turkish validity and reliability tests of the scale were performed by Kurşun and Kanan (2012). The scale consists of 4 sub-dimensions and is scored with a 6-point Likert type. After all item scores are added, the total scale score is divided by 24 and the total scale score is between 1-6. It is thought that as the score obtained from the scale increases, nurses' perception of care behaviors also moves in the same direction [20]. In this test, the Cronbach's alpha value of the scale was found to be 0.95.

2.4. Data analysis

All data were analyzed by saving them to the SPSS version x program on the computer, and summarized using number, percentage, mean, and standard deviation. The relationship between variables Pearson correlation analysis, the t-test was used in the comparison of two independent groups, the one-way analysis of variance in the comparison of two or more unrelated groups, and the Bonferroni test, one of the post hoc tests, was used to determine the source of the difference. Levene statistics were used to determine the homogeneity of the variance and it was found that the variances were homogeneous ($p>0.05$). Whether the Caring Behaviors Scale-24 scores were predicted by the variables found to be significant, and which variable affected more and in what direction was evaluated by linear regression analysis. Durbin-Watson values were found to be 1.67 in the analysis, which means that there is no autocorrelation between the error terms. The variance amplification factor (VIF) varies between 1.09 and 9.85, and it is seen that there is no problem of multicollinearity. The data of this study are reported with the STROBE checklist.

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3. Results

3.1. Nurses' Introductory Characteristics

It was determined that 70.5% of the nurses were between the ages of 20-29, 65.1% were women, 80.5% were undergraduate graduates, 34.6% were married, 31.0% had children, and the monthly income of 61.9% did not compensate their expenditures.

3.2. Nurses' Job Stress, Job Satisfaction and Caring Behaviors Score

The nurses' total work stress score was calculated as 0.86±0.19, with a job satisfaction total score average of 3.35±0.53 and a caring behavior total score average of 5.20±0.61.

3.3. The Level of Perception of Caring Behaviors According to Some Characteristics of Nurses

Nurses' age group, gender, marital status, education level, having a child and having enough income to cover their expenses, and caring behavior scores, pre-pandemic working characteristics, total working hours, staff, position, shift and weekly working hours and care behavior It was determined that there was no difference between the scores ($p>0.05$). It is stated in Table 1 that the difference between nurses' willingness to choose the profession, their evaluation of the unit and working environment, and their caring behavior score were significant ($p<0.05$).

Table 1. Comparison of nurses' pre-pandemic working characteristics with CBI-24 total score average.

Variables		n	CBI-24 $\bar{x}$±sd	Test value	p value
Choosing a profession	Yes	181	5,26±0,62	2,18 (259) †	**0,03**
	No	80	5,08±0,58		
Total working time	Less than 5 years	156	5,14±0,64	1,26 (3, 255, 258) ‡	0,28
	6-10 years	49	5,27±0,54		
	11-15 years	18	5,39±0,50		
	15 years and above	36	5,23±0,58		
Staff	Contractual	157	5,16±0,63	-1,64 (256) †	0,10
	Regular	101	5,29±0,55		
Position	Nurse	244	5,21±0,62	-0,39 (256) †	0,70
	Responsible nurse	14	5,27±0,40		
Unit of work *	Surgical clinics	49	5,08±0,53	3,11 (4,230,234) ‡	**0,01**
	Internal clinics[2]	31	5,07±0,43		
	Adult ICU[3]	85	5,39±0,58		
	Pediatric units[4]	13	5,11±0,67		
	Bedless units[5]	57	5,19±0,65		
Work shifts	Day	17	5,14±0,66	-0,46 (241) †	0,64
	Day+night	218	5,22±0,59		
Weekly working hours	45hr	92	5,21±0,58	-0,73 (225) †	0,46
	46hr and above	135	5,27±0,57		
Evaluation of the working environment **	Good [1]	55	5,35±0,52	5,72(2,238,240) ‡	**0,01**
	Middle[2]	48	5,17±0,63		
	Bad [3]	64	4,91±0,57		

† t test, ‡ ANOVA test, sd: standard deviation, CBI-24: Caring Behaviors Inventory-24, * 3>1,2 ** 1>3

There is no significant difference between the caring behavior score according to the post-pandemic working characteristics of the nurses, work shifts, weekly working hours, working status in the Covid-19 clinic, and working environment evaluation ($p>0.05$) (Table 2). It was determined that there was a low-strength negative correlation between

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the number of patients cared per day during the pandemic and the caring behavior score ($p<0.05$).

Table 2. Comparison of nurses' post-pandemic working characteristics with CBI-24 total score average.

Variables		N	CBI-24 $\bar{x}$±sd	Test value	p value
Work shifts	Day	17	5,14±0,66	-0,39 (256) †	0,69
	Day+night	241	5,20±0,61		
Weekly working hours	45hr	59	5,24±0,63	0,39 (242) †	0,70
	46hr and above	185	5,21±0,59		
Working status in the COVID-19 clinic	Yes	212	5,23±0,61	0,37(253) †	0,71
	No	43	5,19±0,54		
Working time in the COVID-19 clinic	1-5 months	96	5,24±0,62	-0,08 (199) †	0,92
	6 months and above	105	5,24±0,59		
Evaluation of the working environment	Good	34	5,32±0,57	2,34 (2, 256, 258) ‡	0,10
	Middle	134	5,24±0,61		
	Bad	91	5,10±0,62		

† t test, ‡ ANOVA test, sd: standard deviation, CBI-24: Caring Behaviors Inventory-24

It was determined that the total score of caring behavior did not change by the status of the nurses having Covid-19, living with their family during the pandemic, the individuals taking care of the child of the nurses, who did not live with their family, and receiving psychological support during the pandemic ($p>0.05$). Table 3 indicates the difference between the nurses' willingness to quit their job during the Covid-19 process and the caring behavior score ($p<0.05$).

Table 3. Comparison of COVID-19 planning and education that can be measured appropriately in terms of pandemic and CBI-24 total score measure.

Variables		N	CBI-24 $\bar{x}$±sd	Test value	p value
The status of having Covid-19	Yes	85	5,11±0,58	-1,84 (256) †	0,07
	No	173	5,26±0,62		
The status of willingness to quit the job during the covid-19 process	Yes	108	5,07±0,66	-3,12 (256) †	**0,01**
	No	150	5,31±0,56		
Status of living together with the family	Yes	215	5,20±0,61	-0,09 (254) †	0,92
	No	41	5,21±0,60		
The individual who takes care of the child of the nurses who did not live with their family	Spouse	25	5,28±0,51	1,11 (3,165,168) ‡	0,34
	Mom/ Dad	21	5,13±0,61		
	Other	19	5,06±0,65		
The status of receiving psychological support during the pandemic process	Yes	7	5,07±0,85	-0,60 (251) †	0,54
	No	246	5,21±0,60		

† t test, ‡ ANOVA test, sd: standard deviation, CBI-24: Caring Behaviors Inventory-24

3.4. Correlation Between Job Stress, Job Satisfaction and Caring Behaviors

It was determined that there was a weak significant negative correlation between the sub-dimensions of the Caring Behaviors Inventory-24 being respectful, connectedness, assurance, and the total job stress score (r: -0.15, -0.21, -0.19, -0.19, respectively; $p<0.05$), a

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moderate level of positive correlation between the CBI-24 sub-dimensions of being respectful, connectedness, assurance, and the total job satisfaction score, and a weak significant positive correlation with the knowledge-skill scores. (r: 0.36, 0.39, 0.31, 0.36, 0.14, respectively; $p<0.05$) (Table 4).

Table 4. Comparison of Job Stress Scale and Job Satisfaction Scale for Nurses with CBI-24.

Scale sub-dimension and total			CBI-24				
			Respectful	Connectedness	Knowledge and Skill	Assurance	Total
Job Stress Scale	Workload	r	0,01	-0,05	0,04	0,02	0,02
		p	0,84	0,93	0,49	0,65	0,74
	Job control	r	0,21	0,26	0,18	0,27	0,27
		p	**0,01**	**0,01**	**0,01**	**0,01**	**0,01**
	Social support	r	0,22	0,29	0,17	0,15	0,23
		p	**0,01**	**0,01**	**0,01**	**0,01**	**0,01**
	Total	r	-0,15	-0,21	-0,09	-0,19	-0,19
		p	**0,01**	**0,01**	0,12	**0,01**	**0,01**
Job Satisfaction Scale for Nurses	Positive emotions toward work	r	0,39	0,40	0,22	0,35	0,39
		p	**0,01**	**0,01**	**0,01**	**0,01**	**0,01**
	Appropriate support from superiors	r	0,17	0,23	0,06	0,14	0,18
		p	**0,01**	**0,01**	0,32	**0,02**	**0,01**
	Perceived significance in the workplace	r	0,38	0,42	0,28	0,35	0,41
		p	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
	Pleasant working environment	r	0,16	0,18	-0,03	0,14	0,14
		p	**0,01**	**0,01**	0,59	**0,02**	**0,02**
	Total	r	0,36	0,39	0,16	0,31	0,36
		p	**0,01**	**0,01**	**0,01**	**0,01**	**0,01**

CBI-24: Caring Behaviors Inventory-2

3.5. Determinants of Nurses' Caring Behavior Perceptions

It was determined that the nurses' evaluation of the working environment before the pandemic and the support from superiors negatively affected the care behavior scores. At the same time, job control score and the perceived significance in the workplace from the had a significant positive effect on the caring behavior score ($p<0.05$), while choosing the profession voluntarily, the average number of patients cared per day with the pandemic, the planning to resign during the Covid-19 process, positive emotions towards the job, pleasant working environment, and the total score of job stress and social support sub-dimensions was not found to be a significant predictor ($p>0.05$). Table 5 shows that the evaluation of the pre-pandemic working environment through the regression analysis (β =-0.18), job control (β =0.20), support from superiors (β =-0.39), perceived significance at work (β=0.24) points explain 25.4% of the change in the total average caring behaviors scores.

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Table 5. Determinants of Nurses' Perception of Care Behavior.

Dependent Variable: CBI-24						
	B	**Standard error**	**β**	**t**	**p**	**VIF**
Constant	2,22	0,68		3,26	**0,01**	1,15
Choosing a profession	-0,07	0,08	-0,06	-0,90	0,37	1,13
Evaluation of the working environment before the pandemic	-0,09	0,03	-0,18	-2,89	**0,01**	1,05
Number of patients cared for daily after the pandemic	0,00	0,00	-0,07	-1,10	0,27	1,25
The status of wanting to leave the job during the COVID-19 process	-0,12	0,08	-0,10	-1,58	0,12	2,76
Job Stress Scale, Job control	0,05	0,02	0,20	2,11	**0,04**	1,51
Job Stress Scale, Social support	0,00	0,01	-0,03	-0,36	0,72	2,75
Job Stress Scale, Total	0,55	0,29	0,18	1,89	0,06	8,65
Job Satisfaction Scale for Nurses, Positive emotions toward work	-0,01	0,15	-0,01	-0,04	0,97	9,83
Job Satisfaction Scale for Nurses, Appropriate support from superiors	-0,21	0,10	-0,39	-2,05	**0,04**	2,80
Job Satisfaction Scale for Nurses, Perceived significance in the workplace	-0,25	0,10	0,24	2,52	**0,01**	7,12
Job Satisfaction Scale for Nurses, Pleasant working environment	-0,11	0,10	-0,18	-1,14	0,26	1,15
Job Satisfaction Scale for Nurses Total	0,63	0,42	0,57	1,48	0,14	9,81
R: 0,540	F: 7,76	Durbin-Watson:1,70				
Corrected R^2: 0,254	p: 0,01					

CBI-24: Caring Behaviors Inventory-24, VIF: Variance amplification factor

4. Discussion

4.1. Discussing the Level of Job Stress, Job Satisfaction and Caring Behaviors of Nurses

The nurses' overall job stress level score was calculated as 0.86±0.19, and the work stress level was low. It is thought that this result was reached due to the systematic efforts to establish a working order within the hospital since the first day of the pandemic, the provision of the necessary equipment for the implementation of care to the nurses, the effort to keep the number of patients per nurse at a minimum level, and the regulation of rest periods and vacations according to the clinics. While the pre-Covid-19 indicates that nurses' work stress levels were low [37], moderate [41] and high [35], the work stress level of nurses was found to be moderate [5] and high [19,34] in studies conducted during the pandemic.

The main factors in the pre-pandemic period were the low rest periods, low wages [41], role conflict [35], while essential push factors were the increased workload with the increase in the number of Covid-19 patients, the anxiety of dealing with death and exposure to the risk of infection [34], the discomfort due to protective equipment and the burden of caring for patients [19] during the pandemic.

The job satisfaction level of the nurses was 3.35±0.53 in the study, which is above the average. This result may stem from the emergence of the importance of nursing roles, especially during the pandemic, importance of nurses' ideas about nursing care at work, and the increase in their caring practices rather than medical treatment. Pre-Covid-19 studies reached varying results for job satisfaction as low [15], moderate [9] and high [16]. Studies conducted during the pandemic determined job satisfaction level of nurses was moderate [5] and moderate-high [21,38]. Job satisfaction of nurses was affected by the working conditions in the pre-pandemic period, while the extension of working hours with increasing cases and the uncertainty about who will perform the procedures were impactful during the pandemic.

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This study determined that nurses' level of caring behavior was above average as 5.20±0.61. Since the pandemic processes are periods when nurses are needed most, the importance of nursing care has been better understood in this process [3].The fact that nurses try to make their patients feel safe with care during their profession, spare time for them, allow them to express their feelings and thoughts, show empathy, and motivate them during the recovery process, may have been perceived as high in the pandemic process. The scholarship before Covid-19 indicates that the level of caring behaviors perception was high [7] and moderate [50]. The level of perception of caring behaviors was measured to be high in studies conducted during the pandemic [14], the scores of reassurance and respect from the sub-dimensions of the Caring Behaviors Inventory-24 were also high, and knowledge-skill and commitment scores were low [13].

4.2. Discussing the Perception of Caring Behaviors According to Some Characteristics of Nurses

Nurses who chose the profession willingly in the study had a higher level of caring behavior. Nurses who chose their profession voluntarily were thought to have a high level of caring behavior because they loved and adapted their profession during the pandemic, cared about vocational professionalism, and thought the importance of nursing care in increasing and improving the quality of life for Covid-19 patients. It was found in another study that choosing the profession voluntarily did not affect the caring behavior [17].

Nurses who positively evaluated the pre-pandemic working environment had a higher level of caring behavior than those who had negative perceptions. It is thought that patients state that they are satisfied with nursing care in an environment where nurses can reflect their knowledge and experiences on nursing care, while a good perception of the working environment and conditions positively affects the quality of care.

This study revealed that nurses' caring behaviors working in intensive care units were higher than those in surgical and internal clinics. Since faster in the surgical and internal clinics and the presence of accompanying persons, the duration of patient-nurse interaction may be less than intensive care. Intensive care units are a working environment where patients with critical conditions are intervened, the biopsychosocial needs of patients and their families are met with an integrated working style in the care process, and individualized-holistic care is provided to patients [33]. Therefore, it is thought that nurses have higher caring behaviors than those working in surgical and internal clinics since patients are provided with regular care in intensive care units and the results of care can be assessed. There is no significant difference in the caring behavior score between nurses working in different clinics [50], the intensive care nurses' perception of care is moderate before the pandemic [33]. Moreover, it was reported that nurses working in intensive care units have higher care behaviors compared to nurses working in emergency services, surgery, and internal clinics [7].

The level of caring behavior in the study decreased as the number of patients cared per day increased after the pandemic. The reason for the increase in the number of patients cared per day was due to the increase in the number of cases due to the fluctuations during the pandemic, the increase in the number of patients admitted to the Covid-19 clinics, the emergency room, intensive care unit, the number of patients per nurse increased, and the caring behavior was adversely affected by this situation.

It was determined that the level of caring behavior of nurses who thought to resign after the pandemic was lower than those who did not. The physical and mental exhaustion, lack of promotions, and sufficient financial means were influential reasons nurses thought resigning was quite effective before the pandemic. However, caring behavior decreased as a result of the decrease in the desire to work due to the anxiety brought on by the Covid-19 pandemic, distance from the family, not being able to spare enough time for child care, cancellation of leaves in the post-pandemic period, the lack of time for social activity, loss of motivation due to less available time for it.

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4.3. Discussing the Relationship Between the Scales

The increase in the work stress score of the nurses decreases the caring behavior score. Nurses were most responsible for following up on Covid-19 patients, coordinating other health personnel, and providing supplies, which caused work stress. The multiple stress factors experienced by nurses in fulfilling their responsibilities negatively affected the quality of care, their main responsibility. However, death, contact with patients and their families, conflicts with supervisors, and uncertainty about the therapeutic effect, which are considered stress factors, have a negative effect on caring behavior [35].

The study determined that as the nurses' job satisfaction score average increases, the caring behavior score average also increases. It was thought that the nurses who perceived the support from superiors positively and were satisfied with their jobs may have reflected their performance in nursing care, and thus the quality of care could have increased. It was found that there is a positive correlation between nurses' job satisfaction and caring behavior before the pandemic [27] and studies conducted during the pandemic period [28], while higher job satisfaction leads to higher the quality of care [18]. Salary, rewards, supervision support, and good communication were effective in the high job satisfaction of nurses before the pandemic; while patients' satisfaction with the care applied, their improved their quality of life, and being discharged from the hospital became effective during the pandemic.

4.4. Discussion on the Findings Regarding the Determinants of Nurses' Caring Behavior Perception

It was found that being satisfied with the working environment increases motivation, job satisfaction, and service quality. Moreover, the support from the superiors affected the caring behavior level negatively. It can be argued that this was rooted in the different personal characteristics of nurses and the misinterpretation of support from superiors. A high level of job control positively affects the quality of nursing care [1]. It can be interpreted that the nurses working in the intensive care unit, which allows the development of continuous learning and the decision-making mechanism during emergencies, are dominant, and the quality of care will be positively affected in this environment where patient-based care is provided.

Since this study was conducted with nurses working in Health Sciences University xx Training and Research Hospital between 2020-2021, it cannot be generalized to all nurses, which is a limitation of the study. Sending online forms to many nurses who could not be reached face-to-face was also considered a limitation.

5. Conclusions

The nurses had low job stress, high job satisfaction, and a high perception of caring behavior in the fight against Covid-19. Nurses who voluntarily chose the profession worked in the adult intensive care unit, evaluated the working environment as good before the pandemic, had a low number of patients cared per day during the pandemic, and had no intention of resigning had high perceptions of caring behavior. The main factors affecting caring behaviors were the evaluation of nurses' pre-pandemic working environment, job control, support from superiors, and perceived significance scores in the workplace. This study analyzed the correlation between nurses' perceptions of job stress, satisfaction, and care behaviors and the factors affecting caring behavior during the Covid-19 pandemic. It is thought that determining the factors affecting the care provided by nurses in crucial crises such as pandemics shall guide future practices to optimize the nursing care processes and contribute to the improvements and arrangements for nurses' job stress, satisfaction, and care provision.

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