

# The Predictive Effect of Anxiety and Burnout Levels Related to the COVID-19 Pandemic and Organizational Commitment on their Intention to Leave the Organization of the Healthcare Professionals

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## ABSTRACT

**Objective:** The study was conducted to determine predictive effect of anxiety and burnout levels related to the COVID-19 Pandemic and organizational commitment on their intention to leave the organization of the healthcare professionals.

**Methods:** The sample of study consisted of 251 healthcare professionals who actively worked during the pandemic process. Data were collected by applying the "Coronavirus Anxiety Scale", "COVID-19 Burnout Scale", "Organizational Commitment Scale", and "Intention to Leave the Organization Scale".

**Results:** 66.5% of all participants worked in the pandemic units during the pandemic process, 57.4% of them had COVID-19, 75.3% of them had COVID-19 vaccine, and 32.3% of them lost a relative due to COVID-19. 42.2% of the healthcare professionals had dysfunctional anxiety and they experienced a very high level of burnout, their continuance commitment, which is one of the sub-scales of organizational commitment, was high, their affective and normative commitment was moderate, and their intention to leave the organization was moderate. The anxiety level of healthcare professionals explained 7.7% of the change in their intention to leave the organization. The anxiety ( $p < 0.05$ ) and burnout levels ( $p > 0.05$ ) together explained 8.5% of the change in intention to leave the organization. The Anxiety and burnout levels and organizational commitment levels together explained 25.9% of the change in intention to leave the organization ( $p < 0.05$ ).

**Conclusions:** The anxiety levels and the levels of affective organizational commitment of healthcare professionals during the pandemic process are significant predictors of intention to leave the organization. It is recommended that decision makers make arrangements that will improve health workers' intention to leave the organization, reduce anxiety and burnout levels, and increase organizational commitment levels.

**Keywords:** Anxiety, Burnout, Covid-19 Pandemic, Healthcare Professionals, Organizational Commitment

## INTRODUCTION

Coronaviruses (CoVs) are a large family of viruses that can cause anything from the common cold to more serious infections. A new infectious disease outbreak called COVID-19 was reported in December 2019 [1].

The highest risk occupational group against this virus, which has a high contagious rate, is the health field [2]. From past to present, healthcare professionals have been affected by many contagious diseases and are considered among the groups that are most likely to be affected by possible future pandemics [3]. Working in all health institutions and organizations, nurses, physicians, and all other allied healthcare professionals are exposed to the stress of pandemics at the highest level. As

a result, pandemics endanger the physical and psychosocial health of these people [4]. At the beginning of the COVID-19 pandemic, it was predicted that healthcare professionals all over the world would face an unprecedented situation that they would have to make difficult decisions and would have to work under extreme pressure [5].

Healthcare professionals working with sick individuals during the pandemic are at high risk for mental problems in the short and long term. These mental problems can be especially psychological distress, insomnia, higher perceived stress, anxiety, burnout, anger, and depression. These mental problems, which may also affect the quality of patient care, may be related to personal, social, psychological, and organizational factors [6].

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When these factors, which can be effective during the pandemic period, are examined, the risks of being infected and ill, the risk of transmitting the disease to their close circles, uncertainties about the pandemic, constantly changing protocols, increasing workload, and working hours, deprivation of social support resources, discourses, and approaches that devalue the efforts of healthcare professionals and the stigmatization of them cause mental burden and burnout in healthcare professionals [7-10]. While the burnout rates were high among health workers before the pandemic period, factors such as the anxiety of getting sick during the pandemic period increase burnout in healthcare professionals even more [10].

In addition, demoralization and reluctance to work are frequently observed in healthcare professionals as a result of increased hygiene practices, social distance, and isolation practices [11]. All these situations experienced during the COVID-19 pandemic period may cause reluctance in healthcare professionals to go to work and even leave the profession [8].

Job satisfaction is one of important variables that affect burnout [12]. Healthcare professionals may feel powerless, inadequate, and useless due to burnout, and as a result of these feelings, they may want to leave the organization they work for. The result of this request, which can also be called the intention to leave the job, may result in the employee leaving the organization or starting a new job search process [13]. The survival of an organization depends on the fact that the employees of that organization do not leave the organization. The more committed the employees are to the organization, the stronger the organization becomes. The strength of the bond that the employee feels towards the organization she/he works for is expressed as organizational commitment [14]. There are many factors that affect organizational commitment, such as the safety of the work environment, workload, stress, perceived support, attitudes of managers, rewards, punishments, and attention given to employees [12,15]. All negative behaviors experienced in the organization deeply affect the organizational commitment of the employees towards their work. The sense of organizational commitment reduces the negative consequences such as leaving the job that may occur in individuals [15].

According to the existing literature, studies with healthcare professionals during the COVID19 pandemic period have focused on variables such as fear of COVID-19, anxiety, burnout, hopelessness, depression, psychological well-being, and deterioration in sleep patterns [12,16-21].

In the literature, studies on the impact of the pandemic on organizational commitment and job satisfaction of healthcare professionals have been conducted [22-25]. There are studies examining the predictive effect of factors such as fear of COVID-19, perceived threat of COVID-19, and job stress in healthcare professionals [26-28].

When the current literature is examined, there is no study that examines the predictive effects of the levels of anxiety and burnout due to COVID-19 pandemic and organizational

commitment in healthcare professionals on their intention to leave the organization. For this reason, the present study was conducted to determine (I) anxiety and burnout levels, organizational commitment and intention to leave the organization of healthcare professionals due to the COVID-19 pandemic; (II) identify the influential variables; and (III) the anxiety, burnout levels and organizational commitment to determine predictive effects of intentions to leave the organization.

## METHODS

### Design

This study was a descriptive survey to investigate the factors that influence predictive effect of anxiety and burnout levels related to the COVID-19 pandemic and organizational commitment on their intention to leave the organization of the healthcare professionals.

### Setting and study participants

The descriptive study was carried out in a state hospital and two training and research hospitals located in two cities in the southeast of Turkey. Healthcare professionals working in these institutions formed population of the research. Sample of study consisted of 251 healthcare professionals who voluntarily accepted to participate in study and worked actively during pandemic process.

### Data collection

The data was collected between the dates of June 2021 and October 2021 with an online survey due to the physical distance rules for the healthcare professionals participating in the study. Data were obtained, after their consent was obtained, and by applying the "Personal Information Form", "Coronavirus Anxiety Scale", "COVID-19 Burnout Scale", "Organizational Commitment Scale" and "Intention to Leave the Organization Scale".

### Measurements Tools

**Personal Information Form:** Considering the aims of the study, this form was developed by the researchers, and it includes 14 questions to determine the socio-demographic characteristics, working conditions, and characteristics of the participants regarding the pandemic.

**Coronavirus Anxiety Scale (CAS):** The scale was developed by Lee (2020) to measure anxiety levels of individuals during the pandemic process ( $\alpha=.93$ ); additionally, Evren et al. (2020) carried out its validity and reliability study in Turkish. The scale consists of 5 items based on experiences in the last two weeks. The score range varies between 0- 20. A high score from the scale indicates a higher level of coronavirus-related anxiety in the individuals, and a total score of  $\geq 9$  indicates coronavirus-related dysfunctional anxiety [29,30]. In the present study, Cronbach's alpha value of the scale was determined to be 0.90.

**COVID-19 Burnout Scale (COVID-19-BS):** This scale was adapted from the Burnout Measure, Short Version developed by Malach-Pines in 2005. Turkish adaptation of scale was done by Yildirim and Solmaz (2020). To adapt the COVID-19-BS, the wording and

response format of the original items were changed, such as first replacing “your business” with “COVID-19”. The scale is a one-dimensional, 5-point Likert-type (1=never, 5=always) scale consisting of 10 items. A total score is obtained by summing all the answers on the scale, and the score range varies between 10-50, and the high score obtained from the scale indicates that the level of burnout related to COVID-19 has increased [31,32]. In the present study, Cronbach’s alpha value of scale was determined to be 0.93.

**Organizational Commitment Scale (OCS):** The scale was developed by Allen and Meyer (1991), and it was translated into Turkish by Özkan (2010), and its validity and reliability studies were done by him. The scale has 3 subscales which are “Affective Commitment”, “Continuance Commitment”, and “Normative Commitment”. The scale consists of 22 items, including 7 items on the affective commitments subscale, 8 items on the continuance commitment subscale, and 7 items on the normative commitment subscale. It is a 5-point Likert type scale and the score range varies between 22-110. The highest and lowest values to be taken from the subscales of the scale are as follows; Affective Commitment 7-35, Continuance Commitment 8-40, Normative Commitment 7-35. An increase in the score obtained from the subscales of the scale indicates that the commitment to the institution increases [33,34]. In the current study, Cronbach’s alpha value for the whole scale was detected to be .86.

**Intention to Leave the Organization Scale (ILOS):** The scale was developed by Scott et al. in 1999 to determine the intentions to leave the organization of the employees. The Turkish validity and reliability study of the scale was done by Tanrıöver (2005). The scale is a one-dimensional, 5-point Likert-type scale consisting of 4 items. The score range varies between 10-50. High scores obtained from the scale indicate that individuals have a high intention to leave their organization [35,36]. The Cronbach’s alpha value of the scale in the present study was .78.

#### Statistical Analysis

The data was analysed in the SPSS 22 package program. In the evaluation of the data, descriptive statistical methods, t-test, One Way Anova, Kruskal Wallis, Mann Whitney-U, correlation, and regression analyzes were used. The p-value was accepted as significant at the  $p < 0.05$  level.

#### Ethical Approval

This study was performed in line with the principles of the Declaration of Helsinki. Approval was obtained from the Clinical Research Ethics Committee of Gaziantep University (2021/215) and from the head of the university hospital in which the study was conducted. The purpose and process of this study was explained by the researchers to the participants. Before collecting the research data, after informing about the study, the participants’ consents were obtained, and after that, the data was collected. The study participants were guaranteed confidentiality and voluntary participation and provided their written informed consent.

#### RESULTS

172 (68.5%) of the 251 healthcare professionals participating in the study were female, the age range was mostly between 26-35 (62.5%). Of the participants, 93 (37.1%) were single. 28 were doctors (11.2%), 153 were nurses (61%), 17 were midwives (6.8%). The majority of the participants (35.1%) had a term of employment of 6-10 years in the healthcare sector, and the majority (59.8%) had been working in their current institutions for 0-5 years. 121 (48.2%) of the participants were currently working in internal/surgical units, 21 (8.4%) were working in the pandemic units, and 167 (66.5%) of all participants had the experience of working in the pandemic units during the pandemic process.

In terms of working patterns in the institution, the majority of the participants (39.4%) were working both during the day shifts and night shifts. The number of participants who experienced COVID-19 was 144 (57.4%), the number of those who had COVID-19 vaccine was 189 (75.3%), and the number of those who lost any relatives due to COVID-19 was 81 (32.3%) (Table 1).

When the scales’ score of the healthcare professionals participating in the research were examined, the mean score of CAS was  $7.49 \pm 5.53$ , the mean score of COVID-19-BS was  $35.04 \pm 9.49$ , the mean score of the subscale of affective commitment OCS was  $19.69 \pm 7.72$ , the mean of the subscale of continuance commitment from OCS was  $26.97 \pm 7.92$ , and the mean score of the subscale of normative commitment from OCS was  $20.10 \pm 5.86$ , and the mean score ILOS was  $12.06 \pm 5.75$  (Table 2).

A positive moderate correlation between CAS and the COVID-19-BS and a weak positive correlation between CAS and ILOS were found.

No correlation was found between CAS and the subscales of OCS ( $p > 0.05$ ). A weak positive correlation between Covid19-BS and ILOS, positive correlation between Covid-19-BS and subscales of ILOS were found.

A weak negative correlation was found between the affective and normative commitment subscales of OCS and ILOS ( $p = .000$ ) (Table 3).

Three different models were developed in the multiple regression analysis to reveal whether the anxiety and participants during the pandemic process and their organizational commitment predict intention to leave the organization.

A significant correlation was found in regression analysis performed to reveal how the anxiety level predicted the intention to leave the organization in Model 1 ( $F = 20.642$ ,  $p < 0.001$ ). According to Model 1, the level of anxiety explained 7.7% of the change in the intention to leave the organization of healthcare professionals ( $R = .277$ ,  $R^2 = .077$ ). While there was significant correlation for the anxiety ( $F = 11.448$ ,  $p < 0.05$ ), no significant correlation was found for the burnout in Model 2, which was conducted to reveal how the anxiety and burnout

levels together predicted the intention to leave the organization. The anxiety and burnlevels together explained 8.5% of the change in intention to leave the organization ( $R=.291, R^2=.085$ ). A significant correlation was found in Model 3, which was conducted to reveal how the level of anxiety and burnout and organizational commitment (Affective commitment) predicted the intention to leave the organization ( $F=21,461, p<0.001$ ). The

anxiety and burnout levels and organizational commitment levels together explained 25.9% of the change in the intention to leave the organization ( $R=.509, R^2=.259$ ). It was observed that anxiety levels and affective commitment levels of healthcare professionals during the pandemic were significant predictors of their intention to leave the organization ( $p<0.05$ ) (Table 4).

**Table 1.** The Distribution of Socio-Demographic Characteristics of the Healthcare Professionals (n=251)

Socio-Demographical Characteristics		Number (%)
<b>Gender</b>		
Female		172 (68.5)
Male		79 (31.5)
<b>Age</b>		
18-25		34 (13.5)
26-35		156 (62.5)
36-45		54 (21.5)
46 and more		7 (2.8)
<b>Marital status</b>		
Single		93 (37.1)
Married		158 (62.9)
<b>Occupation</b>		
Doctor		28 (11.2)
Nurse		153 (61.0)
Midwife		17 (6.8)
Laborant/Radiology technician		11 (4.4)
Paramedic/Emergency medical technician		3 (1.2)
Other		39 (15.5)
<b>Term of employment in the healthcare industry</b>		
0-5 years		87 (34.7)
6-10 years		88 (35.1)
11-15 years		45 (17.9)
16 years and more		31 (12.4)
<b>Term of employment at current institution</b>		
0-5 years		150 (59.8)
6-10 years		63 (25.1)
11-15 years		23 (9.2)
16 years and more		15 (6.0)
<b>Current unit of work</b>		
Emergency Service		27 (10.8)
Internal Units/Surgical Units		121 (48.2)
Pandemic Services/Intensive Care for the Pandemic		21 (8.4)
Intensive Care		30 (12.0)
Management and Other		52 (20.7)
<b>The experience of working in the pandemic units during the pandemic process</b>		
Present		167 (66.5)
Not present		84 (33.5)

Working pattern in the institution		
Day shift		83 (33.1)
Both day shift and night shift		99 (39.4)
Night shift		69 (27.5)
History of having COVID-19		
Present		107 (42.6)
Not present		144 (57.4)
The status of being vaccinated against COVID-19		
Present		189 (75.3)
Not present		62 (24.7)
History of losing any relatives due to COVID-19		
Present		81 (32.3)
Not present		170 (67.7)
The thoughts on the adequacy of protective equipment in the institution during the COVID-19 pandemic process		
Adequate		188 (74.9)
Inadequate		63 (25.1)
The thoughts on the adequacy of the number of healthcare professionals in the institution during the COVID-19 pandemic process		
Adequate		116 (46.2)
Inadequate		135 (53.8)

**Table 2.** The Mean Scores of Healthcare Professionals on the Coronavirus Anxiety Scale, Covid-19 Burnout Scale, Organizational Commitment Scale, and Intention to Leave the Organization Scale

Scales	X±SD	Min.	Max.
Coronavirus Anxiety Scale	7.49±5.53	0.00	20.00
COVID-19 Burnout Scale	35.04±9.49	10.00	50.00
Organizational Commitment Scale			
Affective Commitment	19.69±7.72	7.00	35.00
Continuance Commitment	26.97±7.92	8.00	40.00
Normative Commitment	20.10± 5.86	7.00	35.00
Intention to Leave the Organization Scale	12.06±5.75	4.00	24.00

**Table 3.** The Correlation Between the Mean Scores of Healthcare Professionals from the Coronavirus Anxiety Scale, Covid-19 Burnout Scale, Organizational Commitment Scale, and Intention to Leave the Organization Scale

	CAS	COVID-19-BS	Affective Commitment Subscale	Continuance Commitment Subscale	Normative Commitment Subscale	ILOS
Coronavirus Anxiety Scale (CAS)	1					
The COVID-19 Burnout Scale (COVID-19-BS)	r**=0.536 p=0.000	1				
Affective Commitment Subscale	r=0.116 p=0.068	r=-.103 p=0.104	1			
Continuance Commitment Subscale	r=0.052 p=0.412	r**=0.222 p=0.000	r=0.065 p=0.304	1		
Normative Commitment Subscale	r=0.099 p=0.118	r=-.077 p=0.226	r**=0.554 p=0.000	r=0.210 p=0.001	1	
Intention to Leave the Organization Scale (ILOS)	r**=0.277 p=0.000	r**=0.224 p=0.000	r**=-.381 p=0.000	r=-.027 p=0.672	r=-.280 p=0.000	1

\*\*0.01

**Table 4.** Determination of the Anxiety and Burnout Levels and Organizational Commitment of Healthcare Professionals in the COVID-19 Pandemic Process to Predict their Intention to Leave the Organization

Models	Variables	R	R <sup>2</sup>	B	SD	β	F	t	p
Model 1	Constant	0.277	0.077	90.906	0.590		200.642	160.795	0.000
	Coronavirus Anxiety Scale			0.288	0.063	0.277		40.543	0.000
Model 2	Constant	0.291	0.085	80.102	10.362		110.448	50.949	0.000
	Coronavirus Anxiety Scale			0.229	0.075	0.220		30.056	0.002
	COVID-19 Burnout Scale			00.640	0.044	0.106		10.469	0.143
Model 3	Constant	0.509	0.259	160.934	10.787		210.461	90.478	0.000
	Coronavirus Anxiety Scale			0.341	0.069	0.328		40.921	0.000
	COVID-19 Burnout Scale			0.002	0.040	0.003		0.041	0.967
	The Subscale of Affective Commitment			-0.264	0.050	-0.355		-0.50.133	0.000
	The Subscale of Normative Commitment			-0.113	0.065	-0.116		-0.10.750	0.081

a. Dependent Variable: Intention to Leave the Organization

b. Predictors: (Constant), Coronavirus Anxiety Scale, COVID-19 Burnout Scale, The Subscale of Affective Commitment, The Subscale of Normative Commitment

**Table 5.** The Comparison of the mean scores of the scales on the Coronavirus Anxiety Scale, Covid-19 Burnout Scale, Organizational Commitment Scale, and the Intention to Leave the Organization Scale according to the descriptive characteristics of the participants

Characteristics	n	CAS	COVID-19-BS	Affective Commitment	Continuance Commitment	Normative Commitment	ILOS
		X±SD	X±SD	X±SD	X±SD	X±SD	X±SD
<b>Gender</b>							
Female	172	7.98±5.47	36.05±9.52	19.71±7.61	26.84±7.91	20.18±6.03	11.99±5.87
Male	79	6.43±5.54	32.86±9.11	19.65±8.01	27.26±8.00	19.93±5.53	12.21±5.52
P		0.977	0.422	0.138	0.771	0.167	0.364
<b>Age</b>							
18-25	34	7.32±5.41	34.94±9.10	18.47±5.96	28.85±7.27	19.02±5.38	12.11±4.37
26-35	156	7.40±5.54	35.85±9.37	18.84±7.73	26.82±7.80	19.93±6.03	12.88±6.04
36-45	54	7.72±5.80	33.00±10.00	21.64±7.83	26.74±8.40	21.11±5.57	10.07±5.11
46 and more	7	8.57±4.54	33.14±9.33	29.57±5.28	23.00±9.36	21.28±6.44	8.85±6.03
p		0.914	0.312	0.001**	0.330	0.225	0.008*
<b>Occupation</b>							
Doctor	28	6.17±5.47	30.89±11.14	19.25±7.34	24.96±8.69	18.07±6.17	12.32±6.03
Nurse	153	7.58±5.67	35.16±9.66	18.85±7.65	26.76±7.66	19.87±5.78	12.64±5.72
Midwife	17	8.70±5.00	35±7.43	21.35±5.91	27.35±8.10	20±6.07	12.17±5.44
Laborant	11	7.54±4.00	35.27±7.44	23.27±8.68	31.54±7.67	21.18±5.86	11±4.00
Paramedic	3	4.33±3.05	43.33±3.51	18±4.35	35.66±4.04	25±5.19	9.33±2.51
Other	39	7.79±5.73	36.8±8.44	21.71±8.50	27.12±8.08	21.82±5.57	10.07±6.13
p		0.622	0.103	0.164	0.099	0.093	0.199

Term of employment at current institution							
0-5 years	150	7.40±5.55	34.96±9.52	18.51±7.23	27.13±7.86	19.98±5.45	12.64±5.62
6-10 years	63	6.93±5.54	35.20±10.18	19.47±7.83	27.03±8.20	19.88±6.40	11.77±6.27
11-15 years	23	8.21±5.86	35.08±8.53	24.60±7.89	26.43±8.33	22.13±7.72	9.43±5.36
16 years and more	15	9.66±4.49	35.20±8.42	24.93±7.43	26.00±7.33	19.06±3.88	11.53±4.40
p		.250	.963	.000**	.892	.272	.059
Current unit of work							
Emergency Service	27	7.81±5.85	32.96±10.81	19.48±8.82	26.92±8.52	20.25±5.29	12.37±5.69
Internal Units/ Surgical Units	121	6.58±5.10	34.28±9.46	19.26±7.32	26.95±7.60	20.21±5.86	12.18±5.68
Pandemic Services/Intensive Care for the Pandemic	21	10.95±5.12	37.47±9.02	20.38±6.65	28.42±6.32	19.76±4.38	12.23±5.45
Intensive Care	30	6.70±5.89	35.56±10.30	17.53±6.31	26.43±8.09	18.03±5.93	12.33±5.09
Management and Other	52	8.50±5.73	36.61±8.40	21.78±8.83	26.76±8.99	21.09±6.52	11.40±6.55
p		.010**	.437	.166	.934	.318	.772
The experience of working in the pandemic units during the pandemic process							
Present	167	7.54±5.58	35.25±9.81	18.59±7.36	26.78±7.95	19.34±5.61	12.41±5.77
Not present	84	7.39±5.46	34.64±8.87	21.89±8.00	27.35±7.90	21.61±6.09	11.35±5.69
p		.843	.433	.002	.584	.008*	.150
History of having COVID-19							
Present	107	7.49±5.55	35.22±9.73	19.92±7.69	26.40±8.24	20.6±6.11	11.86±5.74
Not present	144	7.49±5.53	34.91±9.35	19.52±7.77	27.40±7.68	19.68±5.66	12.20±5.78
p		.866	.313	.983	.430	.320	.741
The status of being vaccinated against COVID-19							
Present	189	7.81±5.72	32.22±9.74	20.12±7.89	27.16±7.91	20.35±6.08	12.11±5.82
Not present	62	6.51±4.82	34.5±8.75	18.40±7.10	26.38±7.98	19.30±5.12	11.91±5.58
p		.018*	.237	.384	.910	.144	.588
History of losing any relatives due to COVID-19							
Present	81	9.20±5.48	36.70±7.98	20.41±7.91	27.53±8.27	20.59±5.71	12.80±5.70
Not present	170	6.67±5.38	34.25±10.06	19.35±7.63	26.71±7.76	19.87±5.94	11.71±5.76
p		.944	.018*	.976	.874	.629	.969
The thoughts on the adequacy of protective equipment in the institution during the COVID-19 pandemic process							
Adequate	63	8.85±5.55	36.46±10.12	18.92±6.95	26.12±8.54	19.26±5.91	13.58±5.90
Inadequate	188	7.03±5.46	34.57±9.25	19.95±7.96	27.26±7.71	20.38±5.84	11.55±5.63
p		.990	.194	.118	.208	.965	.784
The thoughts on the adequacy of the number of healthcare professionals in the institution during the COVID-19 pandemic							
Adequate	135	8.15±5.64	36.18±9.67	19.06±6.80	26.54±7.96	19.63±5.53	12.94±5.65
Inadequate	116	6.72±5.32	33.72±9.14	20.43±8.64	27.48±7.87	20.64±6.21	11.03±5.72
p		.545	.336	.000**	.836	.188	.877

\* $p < 0.05$ , \*\* $p < 0.001$

In Table 5, the scales' averages of the participants were compared according to some sociodemographic and employment characteristics. There was no difference in the scores of the scales according to the gender and occupation of the participants ( $p > 0.05$ ).

When evaluated in terms of the age variable, if there was no difference in the anxiety and burnout levels in terms of age groups ( $p>0.05$ ), the average score of the subscale of the Affective Commitment from the Organizational Commitment Scale of the participants aged 46 and over was significantly higher than the other age groups of the participants ( $p<0.001$ ). The Intention to Leave the Organization Scale's mean scores were found to be significantly lower ( $p<0.01$ ) compared to other age groups. When examined in terms of the term of employment in the current institution, the score average of the subscale of the Affective Commitment from the Organizational Commitment Scale of the participants who worked in their current institutions for 16 years or more was found to be higher than the other groups ( $p<0.001$ ).

When effects of the units that the participants were currently working on the anxiety levels of the participants were examined, the score of CAS of participants working in the pandemic units was found to be higher than score of the participants working in the other units ( $p<0.01$ ). The score average of the subscale of the Normative Commitment from the OCS of the participants who had working experience in the pandemic units was found to be significantly lower than the average score of those who did not have the experience of working in the pandemic units ( $p<0.005$ ). There was no significant difference in the mean score of the scale for history of having COVID-19 ( $p>0.05$ ).

When the participants were examined in terms of the variable of being vaccinated against COVID-19, it was seen that score of CAS was higher in the participants who were vaccinated against COVID-19 than those who did not ( $p<0.05$ ). The score of COVID-19-BS was found to be higher for the people who lost their relatives due to COVID-19 than those who did not ( $p<0.05$ ).

It was detected that score of subscale of the Emotional Commitment from the OCS of the participants who thought that the number of healthcare professionals in their institutions was sufficient during the pandemic process was lower than the other group ( $p<0.001$ ).

## DISCUSSION

Considering the working conditions during the pandemic process, it is possible to say that the most difficult and risky professions are those who work in the health sector. The risk of transmission of the disease is higher in healthcare professionals than in others due to their direct and prolonged contact with patients. The unpredictable nature of the COVID-19 pandemic and the alarming incidence of infected professionals have significant impact on psychological health of healthcare professionals [37].

In this case, it becomes more important to know the anxiety, burnout perceptions, organizational commitment levels, intentions to leave the organization, and the variables that affect healthcare professionals. It is important to examine healthcare professionals in terms of these elements in order to manage the health system as it should be during pandemic periods.

In the current study, the majority of the participants were nurses, and doctors and other healthcare professionals were in the minority. 66.5% of all participants worked in the pandemic units during the pandemic process, 57.4% of them had COVID-19, 75.3% of them had COVID-19 vaccine, and 32.3% of them lost a relative due to COVID-19.

When the anxiety levels of healthcare professionals participating in the study due to coronavirus were evaluated, the mean CAS score was found to be  $7.49\pm 5.53$ . In the evaluation of the scale, it was stated that higher scores indicated higher levels of anxiety, while scores of 9 and above indicated dysfunctional anxiety. In the light of this information, it was detected that although the anxiety level of healthcare professionals was relatively low, a substantial proportion of 42.2% had dysfunctional anxiety. In the meta-analysis study of Pappa et al., in which they examined prevalence of anxiety among healthcare professionals during the pandemic, the combined prevalence of anxiety among 12 studies was reported as 24.06% [19]. In the study of Şahin et al. (2020), in which they examined prevalence of anxiety among healthcare professionals during the COVID-19 process in our country, it was revealed that 60.2% of participants had anxiety symptoms [21]. These rates indicated that the anxiety problem experienced by healthcare professionals during the pandemic is a situation that needs to be addressed in terms of employee health. In this process, it has been reported that the frequency of anxiety disorders, post-traumatic stress, and health anxiety symptoms have increased in the general population [38].

It is possible to say that the levels of burnout due to COVID-19 of participants in the present study were quite high. Similar results were seen in studies carried out in different countries. For example, in the study of Orrù et al., 56% of healthcare professionals experienced emotional exhaustion [18], in addition, in the study of Denning et al. (2021) with 3573 healthcare professionals from the UK, Poland, and Singapore, it was revealed that 67% of healthcare professionals experienced burnout [17]. Before the pandemic, healthcare professionals' burnout levels were increasingly noticed as public health crisis in many countries. As COVID-19 spreads around the world, doctors, assistants, nurses, and other healthcare professionals are putting their own health at risk like never before. Excessive workload, lack of information about the mechanism of the virus, lack of treatment for the disease, difficult decisions to make, insufficient supply of personal protective equipment, fear of being infected and transmitting the disease to their families and close circle, witnessing the death of their patients caused healthcare professionals to be under extraordinary stress. All these negativities of the pandemic can cause to burnout in healthcare professionals. In this process, there is concern that burnout and posttraumatic stress disorder may become a 'parallel epidemic'. Concrete actions towards modifiable factors are critical in the management of the pandemic to prevent burnout in healthcare professionals, which is higher than previously reported rates [37].

In the present study, among the subscales of organizational commitment of healthcare professionals participating in the



research, it can be said that their continuance commitment was high, and their affective and normative commitment were at moderate levels. While affective commitment is related to emotional reactions of individuals towards the institution they work for and the satisfaction they get through the institution, continuance commitment is related to the thoughts of the individuals about the losses they will encounter as a result of leaving the institution they work for, and normative commitment is related to the individuals' feeling that they have to always stay connected to the organization they work for [39,34]. It was detected that the continuance commitment of healthcare professionals who participated in the present study was higher than their affective and normative commitments. No matter how high the difficulties experienced during the pandemic process are, it is thought that the deep feeling of the importance and indispensableness of the work they do for human health is effective in this high level of commitment.

Organizational commitment is one of the important factors affecting the performance of healthcare professionals during the COVID-19 period. Yáñez-Araque et al. revealed that healthcare professionals showed excellent commitment during the pandemic [40]. In the study of Sevinç Altaş during the COVID-19 period, it was determined that the organizational commitment of healthcare professionals was high [41]. In the comprehensive study of Gürcüoğlu et al., in which they collected data from 7 regions in our country during the COVID-19 process, it was revealed that score of subscale of the affective commitment from the organizational commitment scale of healthcare professionals was the highest, while score of normative commitment was at the lowest level among the other subscales [25]. In the study of Aminizadeh et al., in which they examined organizational commitment of paramedics during the pandemic process, it was revealed that normative commitment had the highest average among the other subscales and the affective commitment had the lowest average among the other subscales [24].

It can be said that intention to leave the organization of participants in the study was at moderate level. In the study conducted by Uçar et al. in a private hospital during the pandemic, it was revealed that intention to leave the organization was higher in nurses than in other healthcare professionals [42]. In their study, Çini et al. revealed that job stress experienced by healthcare professionals during the pandemic negatively affected their intention to stay at the organization through job satisfaction [26].

COVID-19 pandemic affects not only physical health but also mental health and working life [11]. The Covid-19 crisis caused increase in level of anxiety and burnout in individuals [43]. Increasing anxiety and burnout reduced the organizational commitment of individuals. As a result, the intention to leave the organization of the individuals increased because their burnout levels increased and their organizational commitment decreased [44]. No study has been found in the literature examining the relationship between the level of burnout and organizational commitment of healthcare professionals during the pandemic. According to the results of Esen's study with

the participation of 182 healthcare professionals before the pandemic in 2019, it was determined that level of professional burnout is a full mediator in relationship between job stress and organizational commitment [45].

In a study by Irshad et al., it was concluded that the perceived threat of COVID-19 increased anxiety and intention to leave the organization among the nurses [28]. In their meta-analysis studies, in which Meyer et al. explained the three components of the organizational commitment scale, it was revealed that affective commitment, continuance commitment, and normative commitment were related to intention to leave the organization [47]. As a result of the situations where three components of organizational commitment scale decrease, that is, the decrease in the organizational commitment of the employees, and the increase in the intention to leave the job, results in leaving the organization and labor turnover [34,47]. It has been revealed that an increase in the affective and normative commitments and a decrease in the continuance commitment increase the health and well-being of employees. In addition, it has been revealed that organizational commitment is related to job satisfaction, job participation, and professional commitment [47]. In the literature, it is emphasized that the stronger institutional commitment of health professionals during the pandemic process is a very important factor affecting the intention of these individuals to stay in their jobs [23].

In addition, the socio-demographic and the variables of employment characteristics that may affect the anxiety and burnout levels, organizational commitment, and intention to leave the organization of healthcare professionals due to the pandemic were investigated in the present study. As a result, it was detected that the employees aged 46 and over have higher Affective Commitment and lower intention to leave the organization compared to the others. The participants who have worked in their current institutions for 16 years or more had higher Affective Commitment than those who have worked less. The age and term of employment were among the important factors affecting organizational commitment in the literature. According to the literature, older individuals tend to be more committed to their organizations compared to young people, and it is claimed that older employees were more likely to be satisfied with their professions and their positions in their organizations as the reason for this commitment [46,47]. According to the results of another study, it was revealed that the older employees in the organization and the individuals who work longer in the organization had higher organizational commitment because they had higher autonomy [48]. Örs et al. (2003) showed that there was no significant correlation between the age and organizational commitment [49].

When the effect of the current units of the participants on anxiety was examined, it was found that anxiety level of professionals working in the pandemic units was significantly higher than professionals working in other units. In the literature, results consistent with the present study findings were obtained [20,50,51].

The levels of Normative Commitment, one of the subscales of the Organizational Commitment Scale, were found to be lower than those who did not have the experience of working in the pandemic units. These organizational commitment levels can be increased by rotating the employees in the pandemic units. According to the present study's literature review, it has been observed that no study has yet been conducted between this variable and the organizational commitment.

When evaluated according to the status of having COVID-19 vaccination, the anxiety level of the participants with vaccination was significantly higher than the participants who were not vaccinated ( $p < 0.05$ ). Bayülgen et al. (2021), in their study to determine the anxiety and hopelessness levels of nurses in the pandemic process before the COVID-19 vaccine was developed, revealed that the high anxiety levels of nurses may be related to the fact that an effective vaccine has not been developed yet [20].

When evaluated in terms of the history of losing a relative due to COVID-19, it has been shown that the burnout level of people who lost a relative was significantly higher. During the pandemic, people's fear of losing one of their relatives due to this disease is one of the factors that negatively affect psychological health of individuals [16]. This higher level of burnout may be due to reasons such as working at the forefront of the COVID-19 process, providing one-on-one care to patients with COVID-19, and fear of transmitting this disease to their relatives.

#### Limitations

The main limitation of this study the fact that it only included health workers working in a certain region. Another limitation of the study is that the variables of the study were evaluated only with self-report scales.

#### CONCLUSION

In the present study, correlation between levels of anxiety and burnout, organizational commitment, and intention to leave the organization of healthcare professionals due to the pandemic was examined. According to results of current study, as anxiety levels of healthcare professionals increased during the pandemic process, their burnout levels and intention to leave organization also increased. As burnout levels of healthcare professionals increased, level of organizational commitment (continuance commitment) decreased, and their intention to leave organization increased. As normative commitment and affective commitment levels of participants decreased, their intention to leave organization increased.

It has been observed that anxiety levels and affective commitment levels of participants during the pandemic process are significant predictors of intention to leave the organization. Individuals' intention to leave organization increases, if their anxiety and burnout levels increase, and their organizational commitment decreases. The results of the study presented scientific data that decision-makers should make arrangements to reduce the intention to leave the organization of the healthcare professionals, reduce anxiety and burnout levels,

and increase organizational commitment levels during the pandemic periods.

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**Consent to participate:** Informed consent was obtained from all individual participants included in the study.

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#### REFERENCES

- 1- T.R. Ministry of Health General Directorate of Public Health. (2020). COVID-19 (SARSCoV-2 Infection) general information, epidemiology and diagnosis. T.R. Ministry of Health. Available from: <https://covid19.saglik.gov.tr/Eklenti/39551/0/covid19rehberigenelbilgileripidemiolojivetanipdf.pdf>. Accessed 26 December 2021.
- 2- Çetintepe SP, İlhan MN (2020) Risk Reduction in Healthcare Workers in the Covid-19 Outbreak. J Biotechnol and Strategic Health Res. 1:50-54. <https://doi.org/10.34084/bshr.712539>
- 3- Çalışkan Pala S, Metintaş S (2020) Healthcare Professionals in the Covid-19 Pandemic Estüdam Halk Sağlığı Dergisi. 5(COVID-19 Special Issue):156-68. <https://doi.org/10.35232/estudamhds.789806>
- 4- Enli Tuncay F, Koyuncu E, Özel Ş (2020) A Review of Protective and Risk Factors Affecting Psychosocial Health of Healthcare Workers in Pandemics. Ankara Med J. 2:488-501. <https://doi.org/10.5505/amj.2020.02418>
- 5- Greenberg N, Docherty M, Gnanapragasam S, Wessely S (2020) Managing Mental Health Challenges Faced by Healthcare Workers During Covid-19 Pandemic. BMJ. 368:m1211. <https://doi.org/10.1136/bmj.m1211>
- 6- Stuijzfand S, Deforges C, Sandoz V, Sajin CT, Jaques C, Elmers J, et al (2020) Psychological Impact of an Epidemic/Pandemic on the Mental Health of Healthcare Professionals: A Rapid Review. BMC Public Health. 20:1230. <https://doi.org/10.1186/s12889-020-09322-z>

- 7- Yılmaz Karaman İG, Yastıbaş C (2021) The Relationship of Depression, Anxiety and Posttraumatic Stress Symptoms with Sociodemographic and Vocational Variables in Healthcare Professionals Who Work in COVID-19 Pandemia. *Van Tıp Derg.* 28(2):249-257. <https://dx.doi.org/10.5505/vtd.2021.55453>
- 8- Ataç Ö, Sezerol MA, Taşçı Y, Hayran O (2020) Anxiety and Insomnia Among Healthcare Workers During the COVID-19 Pandemic. *Turk J Public Health.* 18:47-57. <https://doi.org/10.20518/tjph.767187>
- 9- Gomez Salgado J, Domínguez-Salas S, Romero-Martín M, Ortega-Moreno M, García- Iglesias JJ, Ruiz-Frutos J (2020) Sense of Coherence and Psychological Distress Among Healthcare Workers During the COVID-19 Pandemic in Spain. *Sustainability.* 12:6855. <https://doi.org/10.3390/su12176855>
- 10- Yumru M (2020) COVID-19 and Burnout in Health Workers. *Klin Psikiyat.* 23(Ek 1):5-6. <https://doi.org/10.5505/kpd.2020.18942>
- 11- Restubog SLD, Ocampo ACG, Wang L (2020) Taking Control Amidst the Chaos: Emotion Regulation During the COVID-19 Pandemic. *J Vocat Behav.* 119:Article 103440. <https://doi.org/10.1016/j.jvb.2020.103440>
- 12- Arpacıoğlu MS, Baltacı S, Ünübol B (2021) Burnout, Fear of Covid, Depression, Occupational satisfaction Levels and Related Factors in Healthcare Professionals in the COVID-19 Pandemic. *Cukurova Med J.* 46(1):88-100. <https://doi.org/10.17826/cumj.785609>
- 13- Aytaç S, Çetin Aydın G. (2020) The Relationship Between Psychological Health, Burnout and Intention to Leave: A Study on Health Workers. In: Akar S (ed). *Health with its socio-economic dimension.* [Uluslararası Farklı Boyutlarıyla Sağlık Konferansı]. Select papers. E-book, pp. 79-94.
- 14- Özata M (2015) The Determination of Organizational Commitment Levels of Health Staffs in Hospitals. *Sosyal Bilimler Meslek Yüksekokulu Dergisi.* 18(1):155-166.
- 15- Eren H, Demirgöz Bal M (2015) Organizational Commitment in Nursing. *SHYD.* 1(2):44-50. <https://doi.org/10.5222/SHYD.2015.044>
- 16- Alper Ay F, İçen BT (2021) Evaluation of Covid-19 Anxiety and Burnout Levels of Health Workers in the 3rd Peak Period of the Covid-19 Pandemic in Turkey. *J Int Soc Res.* 14(80):1-17.
- 17- Denning M, Goh ET, Tan B, Kanneganti A, Almonte M, Scott A, et al (2021) Determinants of Burnout and Other Aspects of Psychological Well-Being in Healthcare Workers During the COVID-19 Pandemic: A Multinational Cross-Sectional Study. *Plos One.* 16(4):e0238666. <https://doi.org/10.1371/journal.pone.0238666>
- 18- Orrù G, Marzetti F, Conversano C, Vagheggini G, Miccoli M, Ciacchini R, et al (2021) Secondary Traumatic Stress and Burnout in Healthcare Workers During COVID-19 Outbreak. *Int J Environ Res Public Health.* 18(1):337. <https://doi.org/10.3390/ijerph18010337>
- 19- Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsis E, Katsaounou P (2020) Prevalence of Depression, Anxiety, and Insomnia Among Healthcare Workers During the COVID-19 Pandemic: A Systematic Review and Meta-Analysis. *Brain Behav Immun.* 88:901-907. <https://doi.org/10.1016/j.bbi.2020.05.026>
- 20- Yeşil Bayülgen M, Bayülgen A, Yeşil FH, Türksever HA (2021) Determination of Anxiety and Hopelessness Levels of Nurses Working During the COVID-19 Pandemic Process. *SBÜ Hemşirelik Dergisi,* 3(1):1-6. <https://doi.org/10.48071/sbuhemşirelik.839229>
- 21- Şahin MK, Aker S, Şahin G, Karabekiroğlu A (2020) Prevalence of Depression, Anxiety, Distress and Insomnia and Related Factors in Healthcare Workers During COVID-19 Pandemic in Turkey. *J Community Health.* 45(6):1168-1177. <https://doi.org/10.1007/s10900-020-00921-w>
- 22- Chanana N (2021) The Impact of COVID-19 Pandemic on Employees Organizational Commitment and Job Satisfaction in Reference to Gender Differences. *J Public Affairs.* e2695:1. <https://doi.org/10.1002/pa.2695>
- 23- Sharif Nia H, Arslan G, Naghavi N, Sivarajan Froelicher E, Kaveh O, Pahlevan Sharif S, et al (2021) A Model of Nurses' Intention to Care of Patients with COVID-19: Mediating Roles of Job Satisfaction and Organisational Commitment. *J Clin Nurs.* 30(11- 12):1684-1693. <https://doi.org/10.1111/jocn.15723>
- 24- Aminizadeh M, Saberinia A, Salahi S, Sarhadi M, Jangipour Afshar P, et al (2021) Quality of Working Life and Organizational Commitment of Iranian Pre-Hospital Paramedic Employees During the 2019 Novel Coronavirus Outbreak. *Int J Healthc Manag.* 1-9. <https://doi.org/10.1080/20479700.2020.1836734>
- 25- Gürcüoğlu S, Hürmet Çetinel M, Karagöz A (2020) Job Satisfaction Organizational Commitment Relationship: A Research on Airline Employees. *J Hum Sci.* 17(4):1204-21. <https://doi.org/10.14687/jhs.v17i4.6096>
- 26- Çini MA, Erdirençelebi M, Ertürk E (2021) The Effect of Work Stress with Mediation Effect of Job Satisfaction on Intention to Stay at Work in the Covid-19 Pandemic Period. *İAD.* 13(3):2356-2375. <https://doi.org/10.20491/isarder.2021.1266>
- 27- Yiğitöl B, Büyükmumcu S (2021) Analysis of the Relationships Between Fear of Covid-19, Personality Traits, Job Performance and Turnover Intention. *OPUS Int J Soc Res (Pandemic Special Issue).* 17:3414-3447. <https://doi.org/10.26466/opus.890502>

- 28- Irshad M, Khattak SA, Hassan MM, Majeed M, Bashir S (2020) How Perceived Threat of Covid-19 Causes Turnover Intention Among Pakistani Nurses: A Moderation and Mediation Analysis. *Int J Ment Health Nurs.* 30(1):350. <https://dx.doi.org/10.1111%2Finm.12775>.
- 29- Lee SA (2020) Coronavirus Anxiety Scale: A Brief Mental Health Screener for COVID-19 Related Anxiety. *Death Stud.* 44(7):393-401. <https://doi.org/10.1080/07481187.2020.1748481>
- 30- Evren C, Evren B, Dalbudak E, Topcu M, Kutlu N (2020) Measuring Anxiety Related to COVID-19: A Turkish Validation Study of the Coronavirus Anxiety Scale. *Death Stud.* 3:1-7. <https://doi.org/10.1080/07481187.2020.1774969>
- 31- Yıldırım M, Solmaz F (2022) COVID-19 Burnout, COVID-19 Stress and Resilience: Initial Psychometric Properties of COVID-19 Burnout Scale. *Death Stud.* 46(3):524- 532. <https://doi.org/10.1080/07481187.2020.1818885>
- 32- Malach Pines A (2005) The Burnout Measure Short Version (BMS). *Int J Stress Manag.* 12(1):78-88. <https://psycnet.apa.org/doi/10.1037/1072-5245.12.1.78>
- 33- Meyer JP, Allen NJ (1991) A Three Component Conceptualization of Organizational Commitment. *Hum Resour Manag Rev.* 1:61-89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- 34- Özkan S (2010) The Organizational Commitment And Work Values of Primary School Teachers. Mersin University, Social Sciences Enstitüte, Master Thesis.
- 35- Tanrıöver U (2005) The Effects of Learning Organization Climate and Self Directed Learning on Job Satisfaction, Affective Commitment and Intention to Turnover. Marmara University, Social Sciences Enstitüte, Master Thesis.
- 36- Scott CR, Connaughton SL, Diaz-Saenz HR, Maguire K, Ramirez R, Richardson B, et al (1999) The Impacts of Communication and Multiple Identifications on Intent to Leave: A Multimethodological Exploration. *Manag Commun Q.* 12(3):400-435. <https://doi.org/10.1177%2F0893318999123002>
- 37- Özişik L. (2020). Burnout Among Healthcare Professionals During COVID-19 Pandemic. In: Sain Güven G, Uyaroğlu OA (ed). *İç Hastalıkları ve COVID-19. 1st Edn.* Ankara: Türkiye Klinikleri. pp.103-8.
- 38- Çakır Kardeş V. (2020). Anxiety Disorders and Depression During Pandemics with the Updates on COVID-19. In: Coşar B (ed) *Psikiyatri ve COVID-19. 1st Edn.* Ankara: Türkiye Klinikleri. pp. 23-9.
- 39- Demir F, Yıldırım G (2020) The Role of Internal Communication on Institutional Commitment in the Context of the System Theory in Public Relations: Comparative Analysis in the Transportation Sector. *SBAD.* 3(2):170-194. <https://doi.org/10.38004/sobad.773966>
- 40- Yáñez-Araque B, Gómez-Cantarino S, Gutiérrez-Broncano S, López-Ruiz VR (2021) Examining the Determinants of Healthcare Workers' Performance: A Configurational Analysis During COVID-19 Times. *IJERPH.* 18(11):5671. <https://doi.org/10.3390/ijerph18115671>
- 41- Altaş SS (2021) The Relationships Between Health Workers' Organizational Identification, Organizational Commitment, Organizational Trust and Perceived Organizational Support. *İAD.* 13(1):875-891. <https://doi.org/10.20491/isarder.2021.1171>
- 42- Uçar MZ, Akbolat M, Özer A (2021) Transformation of Business Management in the Covid-19 Pandemic. In: Akbolat M, Ünal Ö (ed) *Investigation of the Relationship Between Altruistic Leadership and Intention to Leave the Work in Health Care Workers in the Covid-19 Period.* Ankara. pp. 1-12.
- 43- Yáñez JA, Jahanshahi AA, Alvarez-Risco A, Li J, Zhang SX (2020) Anxiety, Distress, and Turnover Intention of Healthcare Workers in Peru by Their Distance to the Epicenter During the COVID-19 Crisis. *ASTMH.* 103(4):1614. <https://dx.doi.org/10.4269%2Fajtmh.20-0800>
- 44- Aydın AU, Akgemci T (2020) The Effects of Burnout Syndrome on The Intention of Quitting Job: The Case of Banking Sector Employees. *SPMJ.* 6(11):103-114. <https://doi.org/10.25069/spmj.634829>.
- 45- Esen M (2019) The Relationship Between Job Stress, Burnout and Organizational Commitment: A Research on Health Employees. *Ekonomik ve Sosyal Araştırmalar Dergisi.* 15(1):1-13.
- 46- Özkaya MO, Kocakoç İD, Karaa E (2016) Examining the Relations Between Demographic Factors and Managers' Organizational Commitment: A Field Study. *CBÜ İİBF Yönetim ve Ekonomi Dergisi.* 13(2):77-96.
- 47- Meyer JP, Stanley DJ, Herscovitch L, Topolnitsky L (2002) Affective, Continuance, and Normative Commitment to the Organization: A Meta-Analysis of Antecedents, Correlates, and Consequences. *J Vocat Behav.* 61:20-52. <https://doi.org/10.1006/jvbe.2001.1842>
- 48- Brimeyer TM, Perrucci R, Wadsworth SM (2010) Age, Tenure, Resources for Control, and Organizational Commitment. *Soc Sci Q.* 91(2):511-530.
- 49- Örs M, Acuner AM, Sarp N, Önder ÖR (2003) Evaluation of the Views of the Medical Doctors and Nurses Working in the Hospitals Concerning Their Loyalties to Their Organizations. *Ankara Üniversitesi Tıp Fakültesi Mecmuası.* 56(4).
- 50- Arnetz J, Goetz CM, Sudan S, Arble E, Janisse J, Arnetz BB (2020) Personal Protective Equipment and Mental Health Symptoms Among Nurses During the COVID-19 Pandemic. *JOEM.* 62(11):892-897. <https://doi.org/10.1097/JOM.0000000000001999>

- 51- Naushad VA, Bierens JJ, Nishan KP, Firjeeth CP, Mohammad UH, Maliyakkal AM, et al (2019) A Systematic Review of the Impact of Disaster on the Mental Health of Medical Responders. *PMD*. 34(6):632-643. <https://doi.org/10.1017/s1049023x19004874>