ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

Evaluation of COVID-19 Fear, Anxiety and Their Effects in Physiotherapy Technician Students

Fizyoterapi Teknikerliği Öğrencilerinde COVID-19 Korkusu, Anksiyetesi ve Etkilerinin Değerlendirilmesi

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ABSTRACT Objective: To evaluate novel coronavirus disease-2019 (COVID-19) fear, anxiety, avoidance attitudes and their effects on vocational training in physiotherapy technician students. **Material and Methods:** Eighty physiotherapy technician students were included in this cross-sectional study. Data of the participants regarding the age, gender, number of grades, people living together, precautions taking against COVID-19; the presence of a history of COVID-19 in person/relatives, fears of COVID-19 transmitting and/or infecting during their vocational training, fears of not reaching professional goals and professional competence because of the pandemic and/or its consequences were collected. Coronavirus Anxiety Scale, The Fear of COVID-19 Scale and Avoidance Attitudes from COVID-19 Scales were applied. **Results:** There were the history of COVID-19 in person/relatives in 45%, the fears of transmission COVID-19 from a patient and infecting a patient with COVID-19 during their vocational training in 65% and 52.5%, the fears of not reaching professional goals and professional competence due to the pandemic in 70% and 65% of the participants. Female (p=0.002) and 2nd grade students (p=0.02) in those who fear not reaching professional goals, 2nd grade students (p=0.004) in those who fear of not reaching professional competence were significantly more compared to those who did not. The Fear of COVID-19 Scale score was significantly higher in those with fear of not reaching professional goals (p<0.001) and professional competence (p<0.001) compared to those who did not. **Conclusion:** The fears of not reaching professional goals and competence due to the pandemic and/or its consequences is common among physiotherapy technician students.

Keywords: COVID-19; anxiety; fear; physical therapists

ÖZET Amaç: Fizyoterapi teknikerliği öğrencilerinde yeni tip koronavirüs hastalığı-2019 [coronavirus disease-2019 (COVID-19)] korkusu, anksiyetesi, kaçınma tutumlarının ve mesleki eğitimdeki etkilerinin değerlendirilmesidir. **Gereç ve Yöntemler:** Kesitsel tipteki bu çalışmaya, 80 fizyoterapi teknikerliği öğrencisi dâhil edildi. Katılımcıların yaş, cinsiyet, kaçıncı sınıf öğrencisi olduğu, birlikte yaşamakta olduğu kişiler, COVID-19 ile ilgili aldığı tedbirler, kendisi/yakın çevresinde COVID-19 öyküsü olup olmadığı, mesleki eğitimleri sırasında COVID-19 bulaşma ve/veya bulaştırma, mesleki hedeflere ve yeterliliğe COVID-19 ve/veya sonuçları nedeniyle ulaşma korkuları olup olmadığına dair veriler toplandı. Koronavirüs Anksiyete Ölçeği, COVID-19 Korkusu Ölçeği ve COVID-19'dan Kaçınma Tutumları Ölçekleri uygulandı. **Bulgular:** Katılımcıların %45'inde kendisinde/yakın çevresinde COVID-19 öyküsü, %65'inde mesleki eğitimleri sırasında bir hastadan COVID-19 bulaşması, %52,5'inde bir hastaya COVID-19 bulaştırma korkusu, %70'inde mesleki hedeflerine, %65'inde mesleki yeterliliğe pandemi ve/veya sonuçları nedeniyle ulaşamama korkusu mevcuttu. Mesleki hedeflere ulaşamama korkusu olanlarda kadın (p=0,002) ve 2. sınıf öğrencisi sayısı (p=0,02); istedikleri düzeyde mesleki yeterliliğe ulaşamama korkusu olanlarda 2. sınıf öğrencisi sayısı (p=0,004) olmayanlara kıyasla anlamlı olarak daha yüksekti. COVID-19 Korkusu Ölçeği skoru mesleki hedeflere (p<0,001) ve mesleki yeterliliğe ulaşamama korkusu olanlarda (p<0,001); olmayanlara kıyasla anlamlı olarak daha yüksekti. **Sonuç:** Fizyoterapi teknikerliği öğrencilerinde, mesleki hedeflere ve yeterliliğe pandemi ve/veya sonuçları nedeniyle ulaşamama korkusu sık görülmektedir.

Anahtar Kelimeler: COVID-19; anksiyete; korku; fizyoterapist

The novel coronavirus disease-2019 (COVID-19), which is thought to have first emerged in Wuhan, China, in late 2019 and caused by the severe acute respiratory syndrome-coronavirus-2 virus, was declared as a pandemic by the World Health Organization in March 2020.[1-3] The clinic associated with the disease can vary from the asymptomatic form to the form in which severe clinical findings are observed.[2]

The primary symptoms of the disease are rapidly progressive respiratory system findings that manifest with acute respiratory distress syndrome in most of the severe cases, but it is known to have effects involving other organ systems.[3,4] In the severe cases, the disease may result in heart and respiratory failure and death.[2,4]

The pandemic process, which brought about a rapid change in the field of medicine, caused changes in personal and social lives, and the uncertainties and fears associated with the pandemic had negative impacts on the lives.[1] In this context, studies have shown that in addition to its physical effects, the COVID-19 pandemic can have serious effects on people's mental health.[1-5] It has been reported that anxiety, depression and stress disorders are common mental health problems associated with COVID-19 in the meta-analyses including the data of Turkey.[1,5]

Healthcare professionals are one of the most important components in the management process of infectious diseases such as COVID-19, and they need to feel that the risks they are exposed to are optimally controlled in order to show their professional performance optimally.[6] Long-term stress sources, especially concerns related to infection and its complications, may have negative psychological reflections on healthcare workers.[6,7] In the literature, there are studies reporting that psychological problems, especially depression, anxiety, stress and sleep disorders, are observed more frequently in healthcare workers compared to general population.[6,8-12]

It is known that close contact from person to person increases the risk of transmission in COVID-19. Since there is direct contact with patients during rehabilitation programs, it is possible to think that the risk of disease is increased in people working and trained in the field of physiotherapy and rehabilitation.[13] On the other hand, one-to-one contact with the patient and the experience gained in the clinical environment are important factors in vocational education for students studying in the field of health.[14,15] For this reason, it is thought that the pandemic process may create a negative opinion for the students about the development of their professional skills and their integration with the clinical team.[15]

The aim of our study is to evaluate the fear, anxiety, avoidance attitudes of COVID-19 and their relationships and effects on vocational education in physiotherapy technician students.

MATERIAL AND METHODS

Eighty participants studying in the department of physiotherapy technician were included in this cross-sectional study. Data of the participants regarding the age, gender, number of grades, people living together, precautions taking against COVID-19; whether there are a history of COVID-19 in person/relatives, if any its characteristic, whether there are the fears of COVID-19 transmitting and/or infecting during their vocational training, whether there are the fears of not reaching professional goals and professional competence because of the pandemic and/or its consequences were collected. Afterwards, the participants were asked to answer the questions on the Coronavirus Anxiety Scale, The Fear of COVID-19 Scale and Avoidance Attitudes from COVID-19 Scales (cognitive and behavioral avoidance subscales).

Informed consent form was obtained from all participants before participating in the study. The approval of the Ministry of Health of the Republic of Turkey was obtained for the study (decision number: 2021-12-10T22_35_30). Ethics committee approval was obtained for the study (decision number: 2020-4-25/date: 30.12.2020/Ethics committee of Ankara Yıldırım Beyazıt University, Yenimahalle Training and Research Hospital, Ankara, Turkey). The Helsinki Declaration principles were complied with.

OUTCOME MEASUREMENT

Coronavirus Anxiety Scale: It is a 5-item scale developed by Lee to evaluate coronavirus-related anxiety.[16] The Turkish validity study of the scale was conducted by Evren et al. Participants indicate how often they experience the situations stated in each item with a 5-point Likert-type scale [0=not at all, 1=rare (less than a day or 2), 2=several days, 3=more than 7 days, 4=nearly every day over the last 2 weeks]. The total score is obtained by summing the item scores. The higher total score indicate the higher coronavirus-related anxiety. It has been reported that the cut-off value for distinguishing dysfunctional

anxiety and non-anxious states is 9 (90% sensitivity, 85% specificity).[16,17]

The Fear of COVID-19 Scale: It is a 7-item scale developed by Ahorsu et al. to evaluate coronavirus-related fear.[18] The Turkish validity and reliability study of the scale was conducted by Ladikli et al.[19] Participants indicate how often they experience the situations stated in each item with a 5-point Likert-type scale (1=strongly disagree, 2=disagree, 3=neither agree or disagree, 4=agree, 5=strongly agree). The total score is obtained by summing the item scores. The higher total score indicate the higher coronavirus-related fear.[18,19]

Avoidance Attitudes from COVID-19 Scales: It is a scale developed by Geniş et al. to evaluate cognitive and behavioral avoidance attitudes regarding the COVID-19.[20] It is a 10-item scale and has 2 sub-dimensions: cognitive avoidance and behavioral avoidance. Participants evaluate the statements in each item with a 5-point Likert-type scale (1=definitely not doing, 2=not doing, 3=undecided, 4=doing, 5=definitely doing). A value between 1-5 is obtained by dividing the total score obtained by adding up the item scores in the sub-dimensions of the scale to the number of items in that sub-dimension. The higher score obtained from the sub-dimensions indicate the higher avoidance in the relevant area.[20]

STATISTICAL ANALYSIS

Statistical analyzes were performed using the SPSS (Statistical Package for Social Sciences, SPSS Inc, Chicago Ill, USA) version 20 program. The conformity of numerical variables to normal distribution was examined by visual (histogram and probability charts) and analytical methods (Kolmogorov-Smirnov/Shapiro-Wilk's tests), and the homogeneity of variances was examined using the Levene test. Continuous variables in descriptive analysis were expressed as mean and standard deviation. Continuous variables were expressed as mean and standard deviation in parametric tests, and as median and range (minimum-maximum) in non-parametric tests. Categorical variables were expressed in numbers and percentages. Independent groups t-test was used for comparisons of numerical data meeting parametric test conditions between the 2

groups, and Mann-Whitney U test was used for data that did not. Chi-square test was used to compare categorical data between the 2 groups. To examine the relationships between variables, Pearson correlation analysis (two-tailed) was used for variables that both conformed to the normal distribution, and Spearman test (two-tailed) was used for variables at least one of which did not conform to the normal distribution. Statistical significance level was accepted as p=0.05.

RESULTS

In the study, the data of 80 participants studying in the physiotherapy technician department were evaluated. All of the participants reported that they had taken at least one precaution against COVID-19, no participant declared that they did not take any measures. Thirty six (45%) participants had a history of COVID-19 in themselves or in their relatives. Fifty two (65%) participants reported the fear of COVID-19 transmission from a patient during their vocational training and 42 (52.5%) participants reported the fear of infecting a patient with COVID-19 during their professional training. Fifty six (70%) participants stated that they have fears of not reaching their professional goals due to the pandemic and/or its consequences, 52 (65%) participants stated that they have fears of not reaching the desired level of professional competence due to the pandemic and/or its consequences. There were 8 (10%) participants with the Coronavirus Anxiety Scale score of 9 or greater, the predictive value for distinguishing dysfunctional anxiety and non-anxious states. Descriptive statistics of the study are given in Table 1.

There were no statistically significant differences between participants with and without a history of COVID-19 in themselves or their relatives regarding the age, gender, grade, fear of not reaching professional goals due to pandemic and/or consequences, fear of not reaching the desired level of professional competence due to pandemic and/or consequences, Coronavirus Anxiety Scale score, number of participants with the Coronavirus Anxiety Scale score of 9 or greater, which is the predictive value for dysfunctional anxiety, The Fear of

TABLE 1: Descriptive statistics.	
Age-year (mean±SD) (minimum-maximum)	21.8±3.9 (18-40)
Gender-n (%)	
Female	61 (76.3)
Male	19 (23.8)
Grade-n (%)	
1. grade	34 (42.5)
2. grade	46 (57.5)
People living together-n (%)	
Alone	5 (6.3)
In the student hostel/with friends	5 (6.3)
With family	69 (86.3)
Other	1 (1.3)
Precautions taken against COVID-19-n (%)	
Not taking precaution	0 (0)
Using masks and other protective equipment	80 (100)
Paying attention to the social distance rule	68 (85)
Not leaving the house except for obligations.	61 (76.3)
Taking care of hand washing and hygiene	70 (87.5)
Other	0 (0)
History of COVID-19 in person-n (%)	
Yes	
Ambulatory follow-up	8 (10)
Inpatient follow-up	0 (0)
Inpatient follow-up in intensive care	0 (0)
No	72 (90)
History of COVID-19 in relatives-n (%)	
Yes	
Ambulatory follow-up	31 (38.8)
Inpatient follow-up	1 (1.3)
Inpatient follow-up in intensive care	1 (1.3)
Death	1 (1.3)
No	46 (57.5)
History of COVID-19 in person or relatives-n (%)	
Yes	36 (45)
No	44 (55)
Fear of COVID-19 transmission from a patient during vocational training-n (%)	
Yes	52 (65)
No	28 (35)
Fear of infecting a patient with COVID-19 during vocational training-n (%)	
Yes	42 (52.5)
No	38 (47.5)
Fear of transmitting COVID-19 to family and/or those around them-n (%)	
Yes	62 (77.5)
No	18 (22.5)
Fear of not reaching professional goals due to the pandemic and/or its consequences-n (%)	
Yes	56 (70)
No	24 (30)
Fear of not reaching the desired level of professional competence due to the pandemic and/or its consequences-n (%)	
Yes	52 (65)
No	28 (35)
Coronavirus Anxiety Scale score (mean±SD) (minimum-maximum)	2.3±4 (0-20)
Coronavirus Anxiety Scale score-n (%)	
<9	72 (90)
≥9	8 (10)
The Fear of COVID-19 Scale score (mean±SD) (minimum-maximum)	17.2±6.9 (7-35)
Avoidance Attitudes from COVID-19 Scale score (mean±SD) (minimum-maximum)	
Cognitive avoidance score	2.3±0.9 (1-4.6)
Behavioral avoidance score	4.1±0.7 (2.2-5)

SD: Standard deviation.

TABLE 2: Comparison of variables between people with and without a history of COVID-19 in themselves or their relatives.			
	Yes (n=36)	No (n=44)	p value
Age-year-median (minimum-maximum)	21 (18-32)	20 (18-40)	0.46
Gender-n (%)			
Female	30 (49.2)	31 (50.8)	0.18
Male	6 (31.6)	13 (68.4)	
Grade-n (%)			
1. grade	16 (47.1)	18 (52.9)	0.75
2. grade	20 (43.5)	26 (56.5)	
Fear of not reaching professional goals due to the pandemic and/or its consequences-n (%)			
Yes	26 (46.4)	30 (53.6)	0.69
No	10 (41.7)	14 (58.3)	
Fear of not reaching the desired level of professional competence due to the pandemic and/or its consequences-n (%)			
Yes	25 (48.1)	27 (51.9)	0.45
No	11 (39.3)	17 (60.7)	
Coronavirus Anxiety Scale score-median (minimum-maximum)	1 (0-15)	0 (0-20)	0.28
Coronavirus Anxiety Scale score-n (%)			
<9	32 (44.4)	40 (55.6)	1
≥9	4 (50)	4 (50)	
The Fear of COVID-19 Scale score (mean±SD)	17.3±6.9	17.05±6.9	0.85
Avoidance Attitudes from COVID-19 Scale Score-median (minimum-maximum)			
Cognitive avoidance score	2.1 (1-4.6)	2 (1-4.4)	0.59
Behavioral avoidance score	4 (2.6-5)	4 (2.2-5)	0.51

*Statistical significance level p=0.05; SD: Standard deviation.

COVID-19 Scale score, the Avoidance Attitudes from COVID-19 Scale cognitive and behavioral avoidance scores (p>0.05). The comparison results are shown in Table 2.

The number of female participants (p=0.002), the number of 2nd grade students (p=0.02) and The Fear of COVID-19 Scale score (p<0.001) were significantly higher in the group that reported the fear of not reaching professional goals, compared to the group that did not report. There were no statistically significant differences between the groups regarding the age, a history of COVID-19 in the person or relatives, Coronavirus Anxiety Scale score, number of participants with the Coronavirus Anxiety Scale score of 9 or greater, which is the predictive value for dysfunctional anxiety, the Avoidance Attitudes from COVID-19 Scale cognitive and behavioral avoidance scores (p>0.05). The comparison results are shown in Table 3.

The number of 2nd grade students (p=0.004) and The Fear of COVID-19 Scale score (p<0.001) were significantly higher in the group that reported the fear of not reaching the desired level of professional competence, compared to the group that did not report. There were no statistically significant differences between the groups regarding the age, a history of COVID-19 in the person or relatives, Coronavirus Anxiety Scale score, number of participants with the Coronavirus Anxiety Scale score of 9 or more, which is the predictive value for dysfunctional anxiety, the Avoidance Attitudes from COVID-19 Scale cognitive and behavioral avoidance scores (p>0.05). The comparison results are shown in Table 4.

In the study, the relationships between the Coronavirus Anxiety Scale score, The Fear of COVID-19 Scale score, the Avoidance Attitudes from COVID-19 Scale cognitive and behavioral avoidance scores were evaluated. It was observed that there was a positive, statistically significant, moderate correlation between the score of the Coronavirus Anxiety Scale and the score of The Fear of COVID-19 Scale (r=0.54 p<0.001). That is, as

coronavirus-related fear increased, so did coronavirus-related anxiety. It was observed that there was a negative, statistically significant, low level correlation between the behavioral and cognitive avoidance scores (r=-0.25 p=0.02). In other words, those who experienced more behavioral avoidance

TABLE 3: Comparison of variables between people with and without fear of not reaching professional goals.			
	Yes (n=56)	No (n=24)	p value
Age-year-median (minimum-maximum)	20 (18-40)	21 (18-32)	0.36
Gender-n (%)			
Female	48 (78.7)	13 (21.3)	**0.002***
Male	8 (42.1)	11 (57.9)	
Grade-n (%)			
1. grade	19 (55.9)	15 (44.1)	**0.02***
2. grade	37 (80.4)	9 (19.6)	
History of COVID-19 in person or relatives-n (%)			
Yes	26 (72.2)	10 (27.8)	0.69
No	30 (68.2)	14 (31.8)	
Coronavirus Anxiety Scale score-median (minimum-maximum)	0.5 (0-20)	0 (0-11)	0.17
Coronavirus Anxiety Scale score-n (%)			
<9	51 (70.8)	21 (29.2)	0.62
≥9	5 (62.5)	3 (37.5)	
The Fear of COVID-19 Scale score-median (minimum-maximum)	19 (7-35)	11.5 (7-26)	**<0.001***
Avoidance Attitudes from COVID-19 Scale score-median (minimum-maximum)			
Cognitive avoidance score	2.1 (1-4.6)	2 (1-3.8)	0.15
Behavioral avoidance score	4 (2.6-5)	4 (2.2-5)	0.9

*Statistical significance level p=0.05.

TABLE 4: Comparison of variables between people with and without fear of not reaching professional competence.			
	Yes (n=52)	**No (n=28)**	**p value**
Age-year-median (minimum-maximum)	20 (18-40)	20.5 (18-32)	0.5
Gender-n (%)0.2			
Female	42 (68.9)	19 (31.1)	0.2
Male	10 (52.6)	9 (47.4)	
Grade-n (%)			
1. grade	16 (47.1)	18 (52.9)	**0.004***
2. grade	36 (78.3)	10 (21.7)	
History of COVID-19 in person or relatives-n (%)			
Yes	25 (69.4)	11 (30.6)	
No	27 (61.4)	17 (38.6)	0.45
Coronavirus Anxiety Scale score-median (minimum-maximum)	0.5 (0-20)	0 (0-15)	0.35
Coronavirus Anxiety Scale score-n (%)			
<9	47 (65.3)	25 (34.7)	1
≥9	5 (62.5)	3 (37.5)	
The Fear of COVID-19 Scale score-median (minimum-maximum)	19 (8-35)	12.5 (7-35)	**<0.001***
Avoidance Attitudes from COVID-19 Scale score-median (minimum-maximum)			
Cognitive avoidance score	2 (1-4.2)	2 (1-4.6)	0.94
Behavioral avoidance score	4 (2.2-5)	4 (2.6-5)	0.74

*Statistical significance level p=0.05.

TABLE 5: Correlations between the variables.				
	Coronavirus Anxiety Scale score	The Fear of COVID-19 Scale score	Cognitive avoidance score	Behavioral avoidance score
Coronavirus Anxiety Scale score		r=0.54 p<0.001*	r=0.00 p=0.97	r=-0.09 p=0.41
The Fear of COVID-19 Scale score	r=0.54 p<0.001*		r=0.10 p=0.36	r=0.07 p=0.53
Cognitive avoidance score	r=0.00 p=0.97	r=0.10 p=0.36		r=-0.25 p=0.02**
Behavioral avoidance score	r=-0.09 p=0.41	r=0.07 p=0.53	r=-0.25 p=0.02**	

*Statistical significance level of correlation p=0.01 (two-tailed); **Statistical significance level of correlation p=0.05 (two-tailed).

had less cognitive avoidance. Other than these, there was no statistically significant relationship (p>0.05). The correlations results are shown in Table 5.

DISCUSSION

In this study, which aimed to evaluate the fear, anxiety, avoidance attitudes associated with COVID-19 in physiotherapy technician students and their effects on vocational education, more than half of the participants stated that they had fear of COVID-19 transmission from a patient during their vocational training (65%), fear of infecting a patient with COVID-19 during their vocational training (52.5%), fear of not reaching their professional goals due to the pandemic and/or consequences (70%), and fear of not reaching the desired level of professional competence due to the pandemic and/or its consequences (65%). In the review by Dedeilia et al., it was reported that although the training was tried to be supported with online resources in medical training, the lack of bedside training, which is important for the optimization of physical examination skills and some non-technical skills, may bring deficiencies in vocational education.[14] In the study of Lasheras et al. evaluating the prevalence of anxiety in medical students during the pandemic process, it was reported that the prevalence was about 28% and the disruptions in academic education were a stressor.[21]

In our study, 10% of the participants had dysfunctional anxiety as measured by the Coronavirus Anxiety Scale. In the study of Wathelet et al. examining mental health problems in university students in the COVID-19 pandemic, it was reported that high level anxiety was observed at a rate of 27.5%.[22]

In the group that reported the fear of not reaching professional, goals the number of female participants (p=0.002), the number of 2nd grade students (p=0.02), in the group that reported the fear of not reaching the desired level of professional competence, the number of 2nd grade students (p=0.004) were significantly higher, compared to the groups that did not report in our study. In the meta-analysis by Lou et al., it was reported that being a woman is one of the common risk factors for COVID-19 related psychological effects in both the general population and healthcare workers.[5] Similarly, in the systematic review by Vizheh et al., it was reported that the frequency of serious psychological symptoms associated with COVID-19 was higher in female healthcare workers.[7] Likewise, in the systematic review by Pappa et al., it was reported that affective symptoms were observed at a higher rate in female healthcare workers compared to men.[12] On the contrary, in the study of Cénat et al., it was reported that there was no significant difference between men and women in terms of pandemic-related depression and anxiety, and the effects of stressors were similar.[23] Similar to our study, in the study of Sneyd et al., it was stated that the greatest impact in medical education during the pandemic process was observed on senior students who try to maximize clinical skills, improve their diagnostic skills, need to focus on integration with the clinical team, and prepare for the transition from student to professional.[15] On the

other hand, Lasheras et al. reported that the results of studies evaluating the relationship between students' education year and their anxiety levels were contradictory.[21]

In our study, it was observed that The Fear of COVID-19 Scale score was significantly higher in those with fear of not reaching professional goals (p<0.001) and those with fear of not reaching the desired level of professional competence (p<0.001) compared to those who did not. In many studies in the literature, it has been emphasized that COVID-19-related depression, anxiety and stress are frequently observed within the scope of psychological problems in healthcare workers.[5-12,24] In the study conducted by Lu et al., fear was also evaluated within the scope of psychological problems, and it was reported that a significant number of healthcare workers experienced moderate or severe fear associated with COVID-19, and the frequency of fear was significantly higher compared to non-healthcare workers.[25] In the study of Martínez-Lorca et al., in which they evaluated fear associated with COVID-19 in university students, it was reported that the fear of COVID-19 were found to be more in students studying in the field of health and social sciences compared to students studying in other fields.[26] In the study conducted by Duman, which examined the relationship between fear of COVID-19 and tolerance to uncertainty in university students, it was reported that a positive moderate-strong statistically significant correlation was observed between the variables.[27]

No statistically significant differences were found between participants with and without a history of COVID-19 in themselves or their relatives regarding the fear of not reaching professional goals due to pandemic and/or consequences and the fear of not reaching the desired level of professional competence due to pandemic and/or consequences in our study (p>0.05). This shows that the impact of the pandemic process on fears of not reaching professional goals and competence is not limited to the experience of disease related to COVID-19. In addition to these disease states, concerns about the future in areas such as educational, social and economic conditions, which are affected by the uncertainties that come with the pandemic process, may also bring professional

concerns. Similarly, in the study of Yang et al., in which they examined the effects of the COVID-19 pandemic on mental health status in physical therapists, it was reported that the presence of a history of isolation in the person or a history of COVID-19 in family members did not make a significant difference on the anxiety and depression states of the individuals.[13] On the contrary, in the study of Lasheras et al., it was reported that the presence of a history of COVID-19 in themselves or their relatives was a risk factor for anxiety in medical students.[21] In the study of Duman, it was reported that those who lost their relatives due to COVID-19 had higher levels of fear associated with COVID-19 than those who did not experience a loss.[27] In the meta-analysis by Cénat et al., it was reported that depression, anxiety, sleep and stress disorders were higher in those who were affected by the pandemic compared to those who were not affected, and this situation was similar in terms of healthcare workers and the general population.[23]

We observed that there was a positive, statistically significant, moderate correlation between the score of the Coronavirus Anxiety Scale and The Fear of COVID-19 Scale score in our study (r=0.54 p<0.001). In other words, as coronavirus-related fear increased, so did coronavirus-related anxiety. Similarly, in the Turkish validity study of the Coronavirus Anxiety Scale by Evren et al., it was reported that a significant correlation was found between The Fear of COVID-19 Scale and the Coronavirus Anxiety Scale.[17] In our study, we also observed that there was a negative, statistically significant, low level correlation between behavioral and cognitive avoidance scores. This means that those who experience more behavioral avoidance have less cognitive avoidance. From this point of view, it seems that the fact that the news about the pandemic takes more place on the agenda of the person and that the person pays more attention to the issues related to the pandemic brings about an increase in behavioral avoidance behaviors. Lasheras et al. also reported that greater knowledge of the disease had a reinforcing effect on students' preventive behavioral responses to the epidemic.[21] In the study of Geniş et al., it was reported that there was a positive, statistically significant correlation between cognitive and behavioral avoidance scores.[20]

Our study has some limitations. The sample size of the study is relatively small. The physiotherapy technician department is a department with 2 years of education. The fact that the preparation period of students to professional life is shorter than many vocational education fields restricts the generalizability of the results of our study to university students studying in other fields. Another limitation of the study is that no comparison was made with non-health professionals in terms of professional concerns. There are many reviews in the literature reporting that the psychological problems associated with the pandemic process in healthcare personnel are more common than in the general population. Since this situation has become a generally accepted information, a comparison with the general population was not made in our study. Studies to be planned by including different vocational education fields and larger samples will make significant contributions to the perspective on the subject.

CONCLUSION

The fears of not reaching professional goals and competence due to the pandemic and/or its consequences is common among physiotherapy technician students. It has been observed that the fear associated with COVID-19 is more common in those with the fear of not reaching professional goals and competence.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

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