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Health and Death Anxiety in Those Who Lost Relatives to COVID-19: A Cross-Sectional Study

Yakınını COVID-19 Nedeniyle Kaybedenlerde Sağlık ve Ölüm Kaygısı: Kesitsel Bir Çalışma

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ABSTRACT Objective: This study aimed to evaluate the health and death anxiety of those who lost their relatives due to coronavirus disease-2019 (COVID-19) in Türkiye. **Material and Methods:** The sample of descriptive and cross-sectional study included 213 individuals had lost their relatives due to COVID-19, lived two cities in western Türkiye. The personal information form, Health Anxiety Scale (HAS), Abdel-Khalek Death Anxiety Scale (AKDAS), and Beck Anxiety Scales were used for data collection between August and October 2021. Data were collected with Google Forms. The study link to the questionnaire was distributed to all eligible participants through email and social media websites (Instagram, and WhatsApp). **Results:** It was found that there was statistical significance in the HAS hypersensitivity to physical symptoms and anxiety scores in terms of gender. A statistical difference was determined in the AKDAS scores by the gender, marital, and child status of the individuals. A positive correlation was found between AKDAS, the negative consequences of the disease subdimension of the HAS, and the total score of the HAS. A positive correlation was found between death anxiety and health anxiety and anxiety total score averages. Moreover, death anxiety was mostly affected by negative results of the disease levels (β=0.421). **Conclusion:** In the study, it was concluded that there is a positive relationship between health and death anxiety in individuals who lost their relatives due to COVID-19. Psychoeducational programs can be applied to individuals who lost their relatives, on issues such as coping with stress, problem solving, anger management, self-knowledge and awareness to reduce their health and death anxieties.

Keywords: Anxiety; COVID-19; death; health; pandemic

ÖZET Amaç: Bu çalışma, Türkiye'de koronavirüs hastalığı-2019 [coronavirus disease-2019 (COVID-19)] nedeniyle yakınlarını kaybedenlerin sağlık ve ölüm kaygılarını değerlendirmeyi amaçlamıştır. **Gereç ve Yöntemler:** Tanımlayıcı ve kesitsel tipte araştırmanın örneklemini Türkiye'nin batısındaki iki şehirde yaşayan, yakınlarını COVID-19 nedeniyle kaybetmiş 213 kişi oluşturdu. Verilerin toplanmasında kişisel bilgi formu, Sağlık Kaygısı Ölçeği (SKÖ), Abdel-Khalek Ölüm Kaygısı (AKÖK) ve Beck Anksiyete Ölçeği (BAÖ) kullanıldı. Verilerin toplanmasında Ağustos-Ekim 2021 tarihleri arasında kişisel bilgi formu, SKÖ, AKÖK ve BAÖ kullanıldı. Veriler Google Formlar ile toplandı. Anketin çalışma bağlantısı tüm uygun katılımcılara e-posta ve sosyal medya web siteleri (Instagram ve WhatsApp) aracılığıyla dağıtıldı. **Bulgular:** SKÖ fiziksel semptomlara karşı aşırı duyarlılık ve anksiyete puanlarında cinsiyete göre istatistiksel olarak anlamlı bulunmuştur. Bireylerin cinsiyet, medeni durum ve çocuk durumuna göre ölüm kaygısı puan ortalamalarında istatistiksel olarak farklılık saptanmıştır. Ölüm kaygısı toplam puan ortalaması ile SKÖ hastalığın olumsuz sonuçları alt boyutu ve SKÖ toplam puanı arasında pozitif yönde bir ilişki bulunmuştur. Ölüm kaygısı toplam puanı ile sağlık kaygısı toplam ve anksiyete toplam puan ortalamaları arasında pozitif korelasyon saptanmıştır. Ayrıca ölüm anksiyetesini en fazla bedensel belirti aşırı duyarlılık ve anksiyete düzeyleri etkiledi (β=0,421). **Sonuç:** Çalışmada yakınlarını COVID-19 nedeniyle kaybetmiş bireylerde sağlık ve ölüm kaygısı arasında pozitif bir ilişki olduğu sonucuna varılmıştır. Yakınlarını kaybeden bireylere sağlık ve ölüm kaygılarına yönelik stresle baş etme, problem çözme, öfke yönetimi, kendini tanıma ve farkındalık gibi konularda psikoeğitim programları uygulanabilir.

Anahtar Kelimeler: Kaygı; COVID-19; ölüm; sağlık; pandemi

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This viral infection, known as the new coronavirus disease-2019 (COVID-19), has spread rapidly due to the nature of the virus, the effect of globalization, and the ease of transportation. It has affected millions of people around the world.[1] It is stated that the high rate of spread and transmission of the COVID-19 virus, the images in the media, and the presence of individuals diagnosed with COVID-19 or being treated in intensive care, increase the health anxiety of individuals.[2]

Health anxiety is defined as a psychological experience that occurs with the thought that people are under a serious threat to their health and that eventually triggers their physical and emotional anxiety symptoms.[3,4] It has been stated that the level of health anxiety has been increased by some facts such as catching the COVID-19 virus during the pandemic process, being in mandatory isolation process, staying in quarantine for a long time, being affected by the pandemic, and losing a relative in the pandemic.[5] Moreover, the increasing case and death rates, the transmission of the disease, and the death that can be caused by the disease have become common issues in the world. During the COVID-19 process, people experience many losses. These include the loss of work, socialization, or freedom opportunities, and most importantly, the loss of loved ones.[6]

When the threat arises and the person finds himself helpless and not knowing what to do in the face of this threat, he or she may feel terrified beyond fear and anxiety. "Death", against which we are helpless, is perhaps the only reality underlying the feeling of terror.[7] Death, which is one of the oldest concepts, is associated with the concept of life during the existence of humanity.[8] In Türkiye and around the world, sudden losses during COVID-19, lack of opportunity to say goodbye to relatives due to isolation, and lack of social support can cause death anxiety in individuals.[8,9] In the study of Aslaner et al. the participants stated that they were most worried about dying and not being able to see their loved ones during the COVID-19 process.[9]

The world has suddenly become an even more chaotic, confusing, and hostile place, in which death lurks around every corner, and people struggle to maintain meaning and self-esteem.[10] Failure to fulfill cultural and religious rituals in the deaths experienced during the pandemic period in Türkiye (washing the deceased, praying for the deceased, wearing a shroud, crying, and burying the deceased loved ones) caused the mourning process to be incomplete. In addition, individuals could not say goodbye to the deceased person due to quarantine and had to experience tragic experiences such as having to grieve alone.[11] That is why it is thought that the psychological effects of the pandemic will be long-term.

The death of a loved one and close person is always very effective for the individual.[11,12] Due to the limitations of the COVID-19 pandemic, most patients died alone without the support of their relatives.[12] The sudden loss of a relative due to COVID-19, and the inability to make the last visit before death, can lead to increased anxiety. In particular, the fact that many people do not visit their loved ones before death or cannot be with them at the time of death due to the anxiety of contagion and the risk of death due to infection leads to long-term grief and anxiety.[11]

The widespread anxiety among COVID-19 patients is largely due to the unknown nature and uncertainties of the virus. Anxiety is often the fear of the unknown and can affect the immune system.[13] Studies have shown that the frequencies of anxiety and depression are high in COVID-19 patients.[14,15] Considering all these, it can be thought that death anxiety has an important role in the progression of a wide variety of anxiety disorders. While only a few previous studies have addressed health anxiety and death anxiety during the COVID-19 pandemic, no study has tested these associations during the same time in Türkiye.[9,16-18]

The pandemic, which disrupts human life, is thought to cause serious psychosocial concerns for people who have lost their relatives due to COVID-19. In this study, grief counseling with a multidisciplinary approach (such as a psychiatrist, psychiatric nurse, sociologist, or psychologist) may gain importance against the possibility of individuals losing their relatives in similar life-threatening situations such as pandemics, earthquakes, fires, floods, and wars. There is no grief counseling in Türkiye. In addition,

it is essential to clarify the impact of death anxiety in different populations and cultures (Türkiye) and may assist healthcare professionals in dealing with this issue more effectively. This study has been planned to examine the health and death anxiety levels of those who have lost their relatives due to COVID-19 during the pandemic process in Türkiye.

MATERIAL AND METHODS

DESIGN, SETTING AND PARTICIPANTS

The research was conducted as descriptive and cross-sectional study. The universe of this research consisted of individuals lived two cities in western Türkiye, and had lost their relatives due to COVID-19. The sample size was determined as 205 individuals in the G*power statistical program, in multiple linear regression analysis, based on 0.01 significance level, 99% power and medium effect (0.15). In this study, 213 individuals who met the inclusion criteria were included in the study, considering sample loss and using random sampling from non-probability sampling methods, in the specified cities. Since the research was conducted during the pandemic period, the haphazard sampling method, which is one of the non-random sampling methods that allows data to be collected from the universe in the easiest, fastest, and most economical way, was used. Individuals who had lost a relative due to COVID-19 were aged 18 and over, and who were volunteered to participate, and had an account on an online social network (Instagram, and WhatsApp) in the study were the inclusion criteria of the study. Individuals who had a visual-hearing impairment and any neuropsychiatric or severe mental illness and completed the online questionnaire form incorrectly or incompletely were the exclusion criteria of the study.

DATA COLLECTION

Data had been collected between August and October 2021. The data was prepared in Google Form and collected via e-mail or social media groups on the Internet. A voluntary consent form, which described the data collection tool, the purpose, and the scope of the research, had been included in the link sent to the participants. Individuals who agreed to participate in the study continued the study by clicking the "I agree to participate in the study" button before filling out the questionnaires.

Measures

Data was collected through the personal information form, the Health Anxiety Scale (HAS), the Abdel-Khalek Death Anxiety Scale (AKDAS), and the Beck Anxiety Scale (BAI). Personal information form prepared by the researchers, consisted of 10 questions about the sociodemographic characteristics of people who lost relatives.

HAS

The HAS was developed by Salkovskis et al.[19] The Turkish validity and reliability study was performed by Aydemir et al.[20] The HAS is a self-report scale consisting of 18 items. The scale has two subdimensions like hypersensitivity to physical symptoms and anxiety (first 14 questions), negative consequences of the disease (next 4 questions). The scoring of the scale is between 0-3 for each item. It is a 4-point Likert scale (0=never, 3=always). The score that can be obtained from the scale varies between 0 and 54 points. There is no reverse coded item. A high score indicates a high level of health anxiety. The Cronbach alpha of the scale was 0.91.[20] In this study, Cronbach's alpha of the scale was found as 0.85.

AKDAS

It was developed by Abdel-Khalek in 2004, considering the cultural differences between Muslim societies.[21] It consists of twenty items. It is a 5-point Likert-type scale (1=none and 5=a lot). The scale has Arabic and English forms. Adaptation to Turkish was done by Aydoğan et al.[22] The scale has five sub-dimensions such as fear of death-related visual stimuli (5 items), fear of physical and spiritual pain of death (5 items), fear of other conditions reminding death (4 items), fear of the afterlife (3 items), and fear of dying himself (3 items). The score that can be obtained from the scale varies between 20 and 100 points. There is no reverse coded item. A high score indicates high death anxiety. The Cronbach's alpha value was 0.86.[22] In this study, Cronbach's alpha value was 0.80.

Beck Anxiety Scale (BAI)

The scale was developed by Beck et al. and its Turkish adaptation was done by Ulusoy et al.[23,24] BAS evaluates the frequency of anxiety symptoms experienced by the person. It includes 21-item and it is a self-assessment scale that is scored between 0-3. Considering the questions, it is questioned to what extent the distress has disturbed him or her in the last week. The scale score range is 0-63. The high score obtained from the scale indicates the severity of the anxiety experienced by the individual. Beck anxiety rating is as follows: Low anxiety is 8-15 points, moderate anxiety is 16-25 points, and severe anxiety is 26-63 points. The Cronbach's alpha value was 0.92.[24] In this study, Cronbach's alpha value was 0.89.

DATA ANALYSIS

The data has been analyzed with the Statistical Package for the Social Sciences 24.0 package program. Continuous variables have been expressed as mean±standard deviation and categorical variables as numbers and percentages. Since parametric test assumptions were provided, t-test and one-way analysis of variance were used in independent groups to compare independent group differences. Pearson correlation and multiple regression analyses were used to examine the relationships between continuous variables. In all analyses, $p<0.05$ was considered statistically significant.

ETHICAL CONSIDERATIONS

The study has been carried out according to the principles of the Declaration of Helsinki. Ethical approval has been taken from the Pamukkale University's Non-Interventional Research Ethics Committee with the decision number 60116787-020-83881 on the date of August 3, 2021. Permissions have been taken for the scales in the study. Moreover, informed consent has been taken from the participants in the study.

RESULTS

The mean age of individuals has been determined as 23.10±7.61, 63.8% of them are women, and 88.7% are single. Details on the sociodemographic characteristics of the participants are shown in Table 1.

TABLE 1: Sociodemographic characteristics of individuals (n=213).

Demographic characteristics	n	%
Gender		
Female	136	63.8
Male	77	36.2
Marital status		
Single	189	88.7
Married	24	11.3
Education status		
Primary school	50	23.5
High school	103	49.4
University and more	60	28.1
Employment status		
Not working	156	73.2
Working	57	26.8
Having a child status		
No	191	89.6
Yes	22	10.3
Income status		
Good	44	20.6
Moderate	142	66.6
Bade	27	12.8
Chronic disease status		
No	192	90.1
Yes	21	9.9
Previous loss status		
No	44	20.7
Yes	169	79.3
Religiosity status		
I'm not religious	16	7.5
I'm religious but very few	24	11.2
I am moderately religious	99	46.5
I am religious	49	23.0
I'm fairly religious	25	11.8
Relationship of the lost		
Parents	58	27
Brothers	19	9
Aunts, uncles, grandparents	136	64
Length of time since the loss		
0-5 months	123	58
6-8 months	90	42
Age ($\bar{X}$±SD)	23.10±7.61	

SD: Standard deviation.

In the study, 27% of the deceased relatives were parents, 9% were siblings, and 64% were aunts, uncles, and grandparents. It has been determined that a period of 0-6 has passed since the loss in 58%, and a period of 6-8 months has passed in 42% of them. According to the length of time since the loss, the rela-

tionship of the loss, amount of loss, no significant difference was found between HAS, AKDAS, and BAI ($p>0.05$).

In Table 2, the individuals' HAS hypersensitivity to physical symptoms and anxiety sub-dimension scores are 14.10±8.15, the HAS adverse consequences of disease sub-dimension mean score is 4.16±2.71, and the total score average of HAS is 18.26±9.92. The AKDAS score is 48.44±16.18 and the mean BAI score is 18.21±13.61.

Statistical significance has been found in the HAS hypersensitivity to physical symptoms and anxiety sub-dimension, and AKDAS total scores according to gender ($p=0.035$; $p<0.05$). There is a statistical difference in the mean AKDAS scores according to the marital status of the participants ($p=0.005$). Statistical significance has been determined in the BAI scores according to the educational status of the participants ($p=0.018$). There are statistical differences in the mean AKDAS scores according to individuals who have children ($p=0.043$) (Table 3).

TABLE 2: Health Anxiety Scale, Abdel-Khalek Death Anxiety Scale, and Beck Anxiety Scale mean scores of individuals (n=213).

	Scales	Minimum-maximum	X̄±SD
Health Anxiety Scale	Hypersensitivity to physical symptoms and anxiety	0-42	14.10±8.15
	Negative results of the disease	0-12	4.16 ±2.71
	Total	1-54	18.26±9.92
Abdel-Khalek Death Anxiety Scale		20-90	48.44±16.18
Beck Anxiety Scale		0-63	18.21±13.61

SD: Standard deviation.

TABLE 3: Health Anxiety, Abdel-Khalek Death Anxiety, and Beck Anxiety Scale Mean scores in terms of the sociodemographic characteristics of the participants (n=213).

	Health Anxiety Scale									
	Hypersensitivity to Physical		Negative Results of the				Abdel-Khalek			
Demographic	Symptoms and Anxiety		Disease		Total		Death Anxiety		Beck Anxiety Scale	
Characteristics	X̄±SD	p value	X̄±SD	p value	X̄±SD	p value	X̄±SD	p value	X̄±SD	p value
Gender[a]										
Female	14.42±9.21	**0.035***	4.51±3.02	0.055	18.94±11.15	0.059	51.31±16.15	**<0.05***	17.19±13.62	0.414
Male	13.91±7.51		3.96±2.51		17.88±9.17		43.36±15.03		18.78±13.63	
Marital status[a]										
Single	14.16±8.33	0.373	4.16±2.79	0.239	18.33±10.15	0.478	48.73±16.61	**0.005***	18.35±13.90	0.621
Married	13.47±6.81		4.04±2.09		17.52±8.15		46.43±12.56		16.86±11.50	
Education status[b]										
Primary school	15.25±7.15		4.18±2.19		19.43±8.68	0.528	43.25±15.74		16.25±9.99	
High school	13.23±7.95	0.397	4.12±2.84	0.993	17.35±9.80		48.18±16.45	0.389	16.31±12.19	**0.018***
University and more	15.38±8.67		4.25±2.50		19.63±10.25		48.13±16.21		18.45±11.23	
Employment status[a]										
Not working	13.78±7.73	0.056	3.96±2.62	0.186	17.75±9.55	0.189	48.55±16.16	0.745	18.23±13.27	0.332
Working	14.96±9.22		4.70±2.92		19.66±10.83		48.14±16.37		18.14±14.63	
Having a child status[a]										
No	16.31±9.35	0.502	5.77±2.52	0.990	22.09±11.10	0.438	47.09±13.48	**0.043***	20.13±12.44	0.399
Yes	13.84±7.99		3.97±2.68		17.82±7.91		48.59±16.49		17.98±13.76	
Previous loss status[a]										
No	14.24±8.42	0.130	4.11±2.60	0.187	47.09±13.48	0.254	49.46±16.54	0.216	18.34±13.52	0.612
Yes	13.54±7.07		4.34±3.14		48.59±16.49		44.50±14.19		17.68±14.13	
Religiosity status										
I'm not religious	14.24±8.42	0.794	14.24±8.42	0.323	14.24±8.42	0.641	14.24±8.42	0.078	14.24±8.42	0.759
I'm religious but very few	13.54±7.07		13.54±7.07		13.54±7.07		13.54±7.07		13.54±7.07	
I am moderately religious	14.24±8.42		14.24±8.42		14.24±8.42		14.24±8.42		14.24±8.42	
I am religious	13.54±7.07		13.54±7.07		13.54±7.07		13.54±7.07		13.54±7.07	
I'm fairly religious	14.24±8.42		14.24±8.42		14.24±8.42		14.24±8.42		14.24±8.42	

*Statistically significant scores for (aIndependent sample t-test, bOne-way analysis of variance) $p<0.05$; SD: Standard deviation.

A positive correlation has been found between AKDAS and the negative outcomes of the disease sub-dimension of HAS and the mean total score of HAS (r=0.930, p=0.006; r=0.497, p=0.047). Furthermore, there is a positive correlation between AKDAS and BAI scores (r=0.359, p<0.05) (Table 4).

A multiple regression model was created to determine the factors affecting the death anxiety levels of individuals who lost their relatives. HAS negative consequences of diseases (t=1.325, p=0.030) and physical symptom hypersensitivity and anxiety (t=5.493; p<0.05) scores and Beck anxiety (t=1.543; p=0.025) scores appear to have a statistically significant positive effect on death anxiety levels. Physical symptom hypersensitivity and anxiety, negative consequences of diseases and Beck anxiety levels of individuals who lost their relatives predicted 13 percent of their death anxiety levels (R^2=0.130). It was observed that negative results of the disease levels (β=0.421) affected death anxiety the most (Table 5).

DISCUSSION

Some situations such as the unexpected and rapid emergence of the COVID-19 pandemic, its effect on the world, the uncertainty of the course of the situation, the isolation of individuals during the process of this disease, and staying away from their relatives, the inability to bury people who have lost their lives under normal conditions can make this process more difficult.[22,23] Both health and death anxiety may occur in individuals because of these difficulties.[22] This study has aimed to evaluate the health and death anxiety levels of those who have lost their relatives due to COVID-19 during the pandemic process in Türkiye.

Health anxiety can be revealed when the individual is stressed when he or she has a serious illness when the disease gains popularity on social media, and the loss of someone from his environment.[24] The low level of

TABLO 4: Relation between participants' Health Anxiety, Abdel-Khalek Death Anxiety, and Beck Anxiety Scales (n=213).

		Health Anxiety Scale						Abdel-Khalek Death Anxiety Scale	
		Hypersensitivity to Physical Symptoms and Anxiety		Negative Results of the Disease		Total			
Scales		r value	p value	r value	p value	r value	p value	r value	p value
Health Anxiety Scale	Negative Results of the Disease	0.555	**<0.05***	-	-	-	-	-	-
	Total	0.974	**<0.05***	0.730	**<0.05***	-	-	-	-
Abdel-Khalek Death Anxiety Scale		0.425	**<0.05***	0.930	**0.006***	0.497	**0.047***	-	-
Beck Anxiety Scale		0.124	0.071	0.052	0.450	0.116	0.091	0.359	**<0.05***

*Statistically significant scores for (Pearson correlation analysis) p<0.05.

TABLE 5: Abdel-Khalek Death Anxiety Scale as predictors of Health Anxiety Scale ve Beck Anxiety Scale (n=213).

Dependent Variable	Independent Variables	β	SE	Beta	t value	p value	F	p value	R^2
Abdel-Khalek Death Anxiety Scale	(Constant)	40.657	2.510		16.200	**<0.05***			
	Hypersensitivity to Physical Symptoms and Anxiety	0.150	0.055	0.125	1.325	**0.030***			
	Negative Results of the Disease	0.425	0.077	0.357	5.493	**<0.05***	10.367	**<0.05***	0.130
	Beck Anxiety Scale	0.159	0.062	0.127	1.543	**0.025***			

β: Unstandardized coefficients; SH: Standard error; t: Test statistic; F: Model statistics; R^2: Ratio of variance explained; *Statistically significant scores for (Pearson correlation analysis) p<0.05.

health anxiety is caused by these revealing factors. Low-health anxiety can be adaptive in terms of recognizing physical changes and organic disorders. It is stated that severe health anxiety can be equivalent to hypochondriasis, and it is not adaptive because it is mostly considered a serious psychiatric disease.[25] In some studies, at the beginning of the pandemic, it is evaluated that the health anxiety of individuals is moderate.[15,26] In this study, it is determined that individuals who have lost a relative due to COVID-19 have a low level of HAS hypersensitivity to physical symptoms and anxiety, negative results of the disease sub-dimension, and total scores. It is estimated that the low level of health anxiety of individuals may be related to the time of the study. The fact that it has been made in the later period of the pandemic may be related to the adaptiveness of individuals to these adverse experiences. In addition, such a result may have been obtained due to the characteristics of the culture in which the study was conducted and the stretching of COVID-19 restrictions.[27]

Since COVID-19 has caused the death of thousands of people, it can reveal or intensify death anxiety in individuals.[10] It is stated that some situations such as infection of the family and environment, fear of being infected, or witnessing the experience of someone who died from the disease also play an important role in the emergence of virus-related anxiety.[24] Furthermore, again, it has been determined that people whose relatives have been diagnosed with COVID-19 have death anxiety in some studies.[10,28] Considering similar studies, it is determined that the death anxiety and Beck anxiety scores of the individuals are moderate in our study. The moderate level of death anxiety among individuals who have lost a relative in our study suggests that it may be an expected finding in the face of these negative experiences.

Studies indicate that women's health anxiety levels are higher than men's.[2,29] Contrary to the studies, it is stated that the sub-dimensions of hypersensitivity to physical symptoms and anxiety are significant in terms of the gender of the individuals, while there is no significance in the total health anxiety scores in this study. Parallel to our study, no significant difference has been found in the anxiety levels of men and women about the COVID-19 outbreak in another study conducted by Zhong et al.[30] The reason why there is no significant difference in health anxiety in terms of gender in this study suggests that the pandemic equally affects both male and female individuals.

Some studies provide evidence that death anxiety is affected by variables such as gender, marital status, and having children.[28,31] Based on supporting the other studies, it is determined that the death anxiety scores of individuals are higher in women in our study. In addition, death anxiety scores are higher in singles and those with children. Since women express their emotions more easily and are aware of their emotions, they may have higher death anxiety. Single people's high death anxiety scores may be due to loneliness and lack of social support. The high death anxiety of those with children may be because they feel more responsible and worry about the care of their children.

It is stated that individuals with a high level of education may have higher levels of knowledge and better attitudes about COVID-19.[30] On the other hand, it is stated that individuals are exposed to more social media, they do more research as their education level of individuals increases, and therefore their exposure to unsafe information may increase their anxiety levels.[29,30] By supporting this second information, it is determined that the Beck anxiety scores of university graduates are higher according to the educational status of the participants in this study.

There are various levels of anxiety. If an individual's anxiety level is severe, his/her functionality may be impaired. Health anxiety is an individual's intense concern about his/her health. Therefore, the individual's anxiety is related to the deterioration of his/her health. Especially due to the measures taken due to COVID-19, health anxiety emerges in the individual. Death anxiety is considered as the anxiety felt about death. Losses experienced by individuals during the pandemic process cause death anxiety.[25] Therefore, there are small differences between death anxiety, health anxiety, and Beck anxiety. However, there is also an important relationship between these concepts. Death anxiety can be thought of as the un-

derlying cause of many different mental problems. Death anxiety, together with health anxiety, forms the basis of anxiety that starts from the moment the individual is born and continues during life.[9] In parallel with the literature, in this study, it has been found that there is a positive correlation between the death anxiety of individuals and the negative results of the disease sub-dimension, the total score of HAS and the mean of BAI; and death anxiety increases when health anxiety increases. Especially in the regression model, it was seen that the levels of negative consequences of the disease affected death anxiety the most. A similar result was seen in a study conducted during the pandemic.[32] Pandemic sürecinde bireylerin olumsuz hastalık sonucu görmesi, yakınlarına benzer durum yaşayabileceği şeklinde düşünmesine yol açmış olabilir.

STUDY LIMITATIONS

One of the limitations is the acquisition of research data via electronic media. In addition, the results are valid only for research participants and cannot be generalized. Another limitation is that the scales used in this study were self-report scales. Participants can respond according to their social environment and cultural characteristics.

CONCLUSION

In the study, it was concluded that there is a positive relationship between health and death anxiety in individuals who lost their relatives due to COVID-19. In this context, psychoeducational programs can be applied to individuals who lost their relatives, on issues such as coping with stress, problem solving, self-knowledge and awareness to reduce their health and death anxieties. It can be important to establish regular multidisciplinary teams (psychiatrists, psychiatric nurses, social workers etc.) to reduce the health and death anxiety of the bereaved persons, to communicate with the public continuously. Moreover, it can be important to plan some training for the pandemic process, and to have continuous psychosocial support activities. It is thought that it is important to provide grief counseling, which is not actively used in Türkiye, to individuals who lost their relatives.

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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.

Authorship Contributions

Idea/Concept: *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Design:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Control/Supervision:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin;* ***Data Collection and/or Processing:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Analysis and/or Interpretation:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Literature Review:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Writing the Article:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin, Nesrin Çunkuş Köktaş;* ***Critical Review:*** *Gülay Taşdemir Yiğitoğlu, Gülseren Keskin.*

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