



An Investigation of the COVID-19-Related Anxiety Levels of Individuals According to Some Demographic Variables

Kamuran Cerit^{1*}

¹Department of Nursing Management, Faculty of Health Sciences, Süleyman Demirel University, Isparta, Turkey

*Corresponding Author: Kamuran Cerit, R.N., Ph.D., Assistant Professor, Department of Nursing Management, Faculty of Health Sciences, Süleyman Demirel University, Çünür 32200 Isparta, Turkey. Tel: +90-246 232 9502, Email: kamurancerit@gmail.com

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Abstract

Background: Pandemics such as COVID-19 create heightened fear and anxiety, causing deterioration in the behaviours, social and psychological well-being of people. It can be thought that the anxiety levels of healthcare workers will increase more because they have a higher risk of contamination, work under COVID-19 isolation-measures and heavy workload.

Objectives: The aim of this study is to determine the COVID-19-related anxiety levels of individuals, the ways of coping with, the demographic factors affecting anxiety, and whether the anxiety level of healthcare workers is different from others.

Methods: This study was carried out with data obtained from 1017 participants via google forms between May-July 2020. In the collection of data, the 12-item COVID-19-related anxiety scale, which was developed by researcher and analysed for validity and reliability; 13 items for ways of coping; some demographic questions were used. The COVID-19-related anxiety scale consisted of three dimensions: "cognitive", "physiological and emotional", "behavioural", which explained 71% of the variance. The Cronbach alpha of scale was 0.85.

Results: The COVID-19-related anxiety levels of participants were slightly above the moderate level (2.83 ± 0.72). The anxiety levels of healthcare workers were not different from others. There was a difference in anxiety levels according to demographic characteristics of participants, such as age, gender, living in Turkey or abroad, working status/type, and smoking addiction. Cognitive coping, social support, distraction, relaxation techniques were identified as ways of coping with anxiety.

Conclusion: COVID-19 pandemic created anxiety in people. More studies need to understand the long-term effects of the pandemic.

Keywords: COVID-19, Anxiety, Coping Skills, Healthcare Workers, Demographic Factors

1. Background

Sweeping rapidly across the world, the coronavirus disease 2019 (COVID-19) pandemic has had a psychological, social, and economic impact on people's lives in addition to the physiological health risks. The existing literature has reported that individuals experienced varying levels of COVID-19-related anxiety.¹⁻¹⁹ The source of anxiety caused by the pandemic is associated with 1- the fear/speed of infection; 2- quarantine length, loss of freedom due to quarantine, the pressure of social isolation rules; 3- high death rates; 4- the influence of the media; 5- insufficient information; 6- economic uncertainties, financial losses; 7- uncertainties and negative experiences such as treatments, vaccines and how long the pandemic will last.^{1,7,8,10,12,20} It has been reported that women^{3,6,8,9,11,14,18,21-25} and young people^{2,4,11,22,26,27} experienced higher levels of anxiety during the pandemic, and some demographic characteristics were associated with anxiety. Due to some risk factors, the pandemic might have more biological, psychological, and social impacts on the healthcare workers.^{5,16,17,28} The following factors are risks that can affect anxiety among

healthcare workers: 1- high mortality rates among healthcare workers; 2- organizational factors such as the shortage of personal protective equipment and intensive care unit beds; 3- concerns about their own health; 4- fear of transmitting the infection in households and to others.^{3,28} However, despite the fact that it has been reported that healthcare workers have more risk factors for COVID-19-related anxiety, hardly any studies have been conducted comparing the anxiety levels of health workers with the general population.

All individuals need to be supported to cope with anxiety. After all, by evaluating the anxiety levels of individuals, the ways of coping with anxiety, and the demographic variables that affect anxiety, it is essential to develop effective health policies and find ways to fight anxiety that will support individuals.

2. Objectives

The present study aims to determine the COVID-19-related anxiety levels of individuals, the ways of coping with anxiety, the demographic factors affecting anxiety,

and ultimately whether the anxiety level of healthcare workers is different from others.

3. Methods

3.1. Study Design

This study was designed as a descriptive and cross-sectional study. In addition, this study was a methodological research in terms of examining the psychometric properties of the scale developed to determine the level of COVID-19-related anxiety.

3.2. Study Place and Participants

This study was conducted between May-July 2020, using an online questionnaire via Google Forms. The population of the study consisted of individuals over the age of 18 living in Turkey and Turks living abroad. The sample group comprised 1017 volunteers who agreed to participate in the study and were accessed through the snowball sampling technique and social networks such as Twitter, Instagram, and WhatsApp. The demographic characteristics of the participants are presented in Table 1.

This study was conducted between May-July 2020, using an online questionnaire via Google Forms. The population of the study consisted of individuals over the age of 18 living in Turkey and Turks living abroad. The sample sizes required for independent sample t-test and one-way ANOVA tests were calculated using the G*Power 3.1 software at small effect sizes, 80% statistical power levels and at 5% statistical significance ($\alpha=0.05$) levels. The smallest sample size for the independent sample t-test was 968 (at Cohen's $d=0.20$, 5% type 1 error, 80% statistical power level and allocation ratio $N_2/N_1=4$). The smallest sample size for the one-way ANOVA test was 969 (Cohen's $d=0.10$, 5% Type 1 error, 80% statistical power level and number of groups = 3). However, considering missing data etc., it was planned to enroll at least 1000 participants. The study sample comprised 1017 volunteers who agreed to participate in the study and were accessed through the snowball sampling technique and social networks such as Twitter, Instagram, and WhatsApp.

3.3. Data Collection Tools

A three-part questionnaire was used in data collection. The first section consisted of questions about demographic characteristics. The second section contained 13 statements about ways of coping with anxiety. These statements were grouped under three headings: 1-Cognitive coping such as "It comforts me to think that I am healthy and safe right now", 2-Social support such as "Talking to my family and friends on the phone makes me feel relieved", and 3-Exercise and relaxation techniques such as "Physical activity helps me reduce stress". The third section presented a 12-item, 5-point Likert scale "COVID-19-related anxiety scale" developed by the researcher based on the literature.^{4,29-31} 1 was expressed as "Disagree Strongly" and 5 as "Agree Strongly". While the minimum score on the scale was 12, the maximum score was 60. Additionally, as the score

increases, the COVID-19-related anxiety experienced by individual increases. The validity and reliability results of the COVID-19-related anxiety scale are reported in the 2nd part of the results section.

3.4. Statistical Analysis

Statistical analysis was performed using SPSS version 20.0 (IBM SPSS Statistics, New York, United States). Means, numbers, and percentages were calculated for descriptive data. Independent samples *t* test, Mann-Whitney U test, ANOVA, Kruskal-Wallis test, and post hoc tests were used for intergroup comparisons. All tests were two-tailed, with a significance level of $P<0.05$.

4. Results

4.1. Characteristics of the Participants in the Study

A total of 1017 participants were included in the study. The mean age of the participants was 32.37 (± 10.90) years. Among the 1017 participants, 449 (44.1%) were between the ages of 18-28 years, 664 (65.3%) were females, 685 (67.4%) had associate or bachelor's degree, 204 (20.1%) were healthcare professionals, 956 (94.0%) lived in Turkey, 314 (30.9%) were smoking, and 195 (19.2%) had chronic disease. Also, 25 (2.5%) of them or their relatives were diagnosed with COVID-19, and 468 (46.0%) of them thought Turkey was successful in its interventions against COVID-19 (Table 1).

4.2. The Validity and Reliability Results of the COVID-19-related Anxiety Scale

The 13-item pool has gone through an expert judgment for content validity. According to the Davis technique, each expert scored the items on a scale from 1 to 4.³² The content validity index (Item-Content Validity Index [I-CVI]) for each item was calculated by dividing the number of experts who selected the number 3 (Relevant, minor changes required) and 4 (Very appropriate) by the total number of experts. Subsequently, the content validity index of the scale was calculated by taking the average of all items in the scale (Scale-Content Validity Index Averaging Calculation Method [S-CVI/AVE]).³³ An item with an I-CVI value below 0.75 was removed from the scale. The S-CVI/AVE of the scale was calculated as 0.99 (Table 2). Exploratory factor analysis (EFA) was applied for construct validity and three dimensions that account for 71.07% of the variance were found out. It has been reported in the literature that COVID-19 anxiety consists of cognitive, behavioural, emotional and physiological dimensions.⁴ Three dimensions identified in this study were named as "cognitive anxiety", "physiological and emotional anxiety" and "behavioural anxiety". The Kaiser-Meyer-Olkin (KMO) value of the scale was found 0.855 and the result of Bartlett's test of sphericity ($\chi^2=6623,014$, $df=66$) was significant ($P=0.000$).

The Cronbach's alpha (α) coefficient is the most commonly used measure of internal consistency. A Cronbach's alpha coefficient higher than 0.70 is considered

Table 1. The Demographic Characteristics of the Participants

The Demographic Characteristics		N: 1017	%
Gender	Female	664	65.3
	Male	353	34.7
Age (mean \pm SD = 32.37 \pm 10.90)	18-28 years	449	44.1
	29-38 years	255	25.1
	39-48 years	206	20.3
	49-58 years	74	7.3
	59-68 years	33	3.2
Marital status	Married	439	43.2
	Single	578	56.8
Level of education	Primary education	39	3.8
	High school	107	10.5
	Associate or Bachelor's degree	685	67.4
	Master's or Doctorate	186	18.3
Profession and career field	Student	248	24.4
	Public institutions	122	12.0
	Private sector (worker)	79	7.8
	Healthcare worker	204	20.1
	Tradesperson and self-employment	66	6.5
	Unemployed	44	4.3
	Retired	26	2.6
	Housewife	43	4.2
	Other	185	18.2
Healthcare worker	Yes	204	20.1
	No	813	79.9
Level of Income	Low income group	366	36.0
	Lower-middle income group	345	33.9
	Middle income group	192	18.9
	Upper-middle income group	70	6.9
	Upper income group	44	4.3
Country	Turkey	956	94.0
	Abroad*	61	6.0
Smoking	Yes	314	30.9
	No	703	69.1
Chronic disease	Yes	195	19.2
	No	822	80.8
Working conditions/types	I was already unemployed, not working	142	14.0
	I work from home	206	20.3
	I work certain days of the week	116	11.4
	I work certain hours	68	6.7
	I work full time	159	15.6
	I got fired from my job	22	2.2
	I have requested voluntary unpaid leave	18	1.8
	I have been put on forced unpaid leave	35	3.4
Who do you live with?	Student and other	251	24.7
	With family	866	85.2
	Alone	115	11.3
	With friends	24	2.4
Did you or any relative of you have COVID-19?	Other	12	1.2
	Yes	25	2.5
	No	426	41.8
Do you think Turkey is successful in its interventions against COVID-19?	No opinion	566	55.7
	Yes	468	46.0
	No	343	33.7
	No opinion	206	20.3

* France, Germany, Afghanistan, Norway, Ireland, UK, Denmark, Czechia, USA.

to indicate high reliability. The Cronbach's alpha coefficient of the COVID-19-related Anxiety Scale was 0.85. The validity and reliability results of the scale are detailed in Table 2.

4.3. The COVID-19-Related Anxiety Levels of the Participants

The COVID-19-related anxiety levels of the participants were found slightly above the moderate level (2.83 ± 0.72). Cognitive anxiety score was 3.64 ± 0.91 , physiological and emotional anxiety score was 2.63 ± 0.98 and behavioural anxiety score was 2.41 ± 1.02 (Table 3).

Total COVID-19-related anxiety scores were compared according to the demographic characteristics of the participants (Table 4). There was no difference between the anxiety scores of the participants in association with their marital status, level of education, profession and career field, being a healthcare worker, chronic diseases, who they are living with, and whether they or their relatives had COVID-19 ($P > 0.05$)

The anxiety levels of the following groups in comparison to each other were statistically ($P < 0.05$) determined to be higher among women than men, among people aged 18–28 years than those aged 39–48 years and 59–68 years, among those living in Turkey to be higher than Turks living abroad, among low-income earners than the middle-

income earners, among smokers than non-smokers, among those who reported their working status as unemployed/not working than those working from home, and those who think Turkey is unsuccessful in its struggle against COVID-19 than those who think the opposite. The responses of the participants regarding the ways of coping with anxiety are shown in Table 5.

The top three expressions to ways of coping with anxiety were identified to be “It comforts me to think that I am healthy and safe right now”, “Talking to my family and friends on the phone makes me feel relieved”, and “Thinking that I can be protected by following the recommendations of the experts gives me relief”.

5. Discussion

The COVID-19-related anxiety level of the individuals was found to be slightly above the moderate. It has been reported in the literature^{2,3,8-13,18,19,34} that individuals experienced different levels of anxiety. As supported by the literature,^{3,6,8,9,11,14, 18,21-25} the anxiety level of women was found to be higher than that of men. This result can be explained by the fact that women's general anxiety levels are higher and they focus on their emotions more than men.²⁴ Despite the above results, a study in the literature¹² has reported that men experienced higher anxiety than women, while some studies^{4,17,19,34} have reported that the

Table 2. The Validity and Reliability Results of the COVID-19-Related Anxiety Scale

Factors and Items	Factor Loading	Item-Total Correlation	I-CVI	α
Physiological and emotional anxiety (Total variance explained=40.25%)				0.90
I feel weak and tired during the pandemic.	0.71	0.64	1	0.83
I feel nervous and anxious because of the pandemic.	0.81	0.70	1	0.83
I am mentally confused due to the pandemic, I cannot concentrate.	0.85	0.69	1	0.83
Thinking about the pandemic keeps me from sleeping.	0.82	0.70	1	0.83
I feel helpless because of the pandemic.	0.81	0.7	1	0.83
During the pandemic, I am experiencing symptoms such as sweating, heart palpitations, muscle tension, stomach pain.	0.70	0.55	1	0.84
Behavioural anxiety (total variance explained=20.18%)				0.87
When I come across news on TV about the pandemic, I change the channel.	0.88	0.35	1	0.85
I don't read the news about the pandemic.	0.90	0.30	0.875	0.86
When there are conversations about the pandemic around me, I escape the environment.	0.87	0.34	1	0.85
Cognitive anxiety (total variance explained=10.64%)				0.78
I am worried about the COVID-19 contagion.	0.85	0.44	1	0.85
I am afraid of dying from COVID-19.	0.81	0.49	1	0.84
I am worried that a relative of mine might die from COVID-19.	0.75	0.38	1	0.85
Total (Total variance explained=71.07%)		S-CVI/AVE 0.99	0.85	

Notes: α = Cronbach alpha; I-CVI = Item-Content Validity Index; S-CVI/AVE = Scale-Content Validity Index Averaging Calculation Method.

Table 3. The COVID-19-Related Anxiety Levels of the Participants

Scale and Sub-dimensions	Number of Items	Mean	SD	Min-Max	Median
COVID-19-related anxiety (scale total)	12	2.83	.72	1-5	2.83
Cognitive anxiety	3	3.64	.91	1-5	3.67
Physiological and emotional anxiety	6	2.63	.98	1-5	2.67
Behavioural anxiety	3	2.41	1.02	1-5	2.33

Table 4. Comparison of the Anxiety Scores of the Participants According to Their Demographic Characteristics

Demographic Characteristics		n	Mean ± SD	Test Statistics	P	Post-Hoc Tests
Gender ^a	Female	664	2.97 ± 0.69	t = 9.193	0.000**	Female > Male
	Male	353	2.56 ± 0.67			
Age ^b	18-28 years	449	2.92 ± .75	F = 5.128	0.000**	18-28 > 39-48 18-28 > 59-68
	29-38 years	255	2.83 ± .71			
	39-48 years	206	2.72 ± .62			
	49-58 years	74	2.73 ± .73			
	59-68 years	33	2.49 ± .60			
Marital status ^a	Married	439	2.79 ± .68	t = -1.379	0.168	
	Single	578	2.86 ± .74			
Level of education ^b	Primary education	39	2.81 ± .72	F = 0.936	0.423	
	High school	107	2.88 ± .77			
	Associate or Bachelor's degree	685	2.84 ± .71			
	Master's and Doctorate	186	2.75 ± 0.70			
Country ^a	Turkey	956	2.84 ± 0.71	t = 2.114	0.035*	Turkey > Abroad
	Abroad	61	2.64 ± 0.75			
Profession and career field ^c	Student	248	2.89 ± 0.78	$\chi^2 = 13.245$	0.104	
	Public institutions	122	2.76 ± .67			
	Private sector (worker)	79	2.78 ± .62			
	Healthcare worker	204	2.83 ± 0.69			
	Tradesperson and self-employment	66	2.91 ± 0.80			
	Unemployed	44	3.08 ± 0.82			
	Retired	26	2.70 ± 0.47			
	Housewife	43	2.67 ± 0.72			
Healthcare worker ^a	Healthcare worker	204	2.83 ± 0.69	t = .128	0.898	
	Others	813	2.83 ± 0.72			
Level of income ^c	Low income group	366	2.89 ± 0.76	$\chi^2 = 10.601$	0.031*	Low income > Middle income
	Lower-middle income group	345	2.85 ± 0.66			
	Middle income group	192	2.71 ± 0.76			
	Upper-middle income group	70	2.75 ± 0.69			
Smoking ^a	Yes	314	2.90 ± 0.69	t = 2.029	0.043*	Yes > No
	No	703	2.80 ± 0.73			
Chronic disease ^a	Yes	159	2.89 ± 0.70	t = 1.270	0.204	
	No	858	2.82 ± 0.72			
Working conditions/types ^c	I was already unemployed, not working	142	2.98 ± 0.68	$\chi^2 = 24.567$	0.002**	I was already unemployed, not working > I work from home
	I work from home	206	2.70 ± 0.70			
	I work certain days of the week	116	2.74 ± 0.73			
	I work certain hours	68	2.94 ± 0.75			
	I work full time	159	2.83 ± 0.68			
	I got fired from my job	22	3.18 ± 0.79			
	I have requested voluntary unpaid leave	18	2.69 ± 0.56			
	I have been put on forced unpaid leave	35	3.01 ± 0.77			
	Student and other	251	2.81 ± 0.73			
Who do you live with ^c	With family	866	2.84 ± 0.71	$\chi^2 = 2.732$	0.435	
	Alone	115	2.76 ± 0.80			
	With friends	24	2.68 ± 0.60			
	Other	12	2.92 ± 0.63			
Did you or any relative of you have COVID-19? ^d	(n: 451) Yes	25	2.98 ± 0.88	Z = -1.390	0.164	
	No	426	2.79 ± 0.75			
Do you think Turkey is successful in its response to Covid-19? ^a	(n: 811) Yes	468	2.78 ± 0.74	t = -2.516	0.012*	No > Yes
	No	343	2.91 ± 0.69			

Notes: Post-hoc tests: Scheffe and Tamhane's T2.

^aIndependent samples t test, ^bANOVA, ^cKruskal-Wallis Test, ^dMann-Whitney U test.

*P < 0.05, ** P < 0.001.

Table 5. The Ways of Coping with Anxiety of the Participants

Ways of Coping With Anxiety		N: 1017	%
1-I relax by taking on hobbies that will help me spend quality time at home	No	199	19.6
	Yes	818	80.4
2-I think prayer and worship relieve me	No	125	12.3
	Yes	892	87.7
3-Talking to my family and friends on the phone makes me feel relieved	No	51	5.0
	Yes	966	95.0
4-Spending time on social media helps me relax	No	207	20.4
	Yes	810	79.6
5-I get away from negative thoughts in my mind by playing digital games	No	548	53.9
	Yes	469	46.1
6-I relax by watching film etc. on TV	No	166	16.3
	Yes	851	83.7
7-Physical activity helps me reduce stress	No	151	14.8
	Yes	866	85.2
8-Meditation helps me relax	No	548	53.9
	Yes	469	46.1
9-I think reading a book relaxes me	No	99	9.7
	Yes	918	90.3
10-I relax with positive thoughts such as the pandemic will end and the vaccine will be developed.	No	183	18.0
	Yes	834	82.0
11-It gives me comfort to think that I can be protected by following expert recommendations	No	56	5.5
	Yes	961	94.5
12-It gives me comfort to know that the whole world is fighting the pandemic.	No	202	19.9
	Yes	815	80.1
13-It comforts me to think that I am healthy and safe right now.	No	47	4.6
	Yes	970	95.4

level of anxiety did not change according to gender.

As some studies in the literature^{2,4,11,22,26} have reported, the anxiety levels of young people were higher than that of elderly, while in some studies,^{17,18,24} it was reported that there was no difference in line with age. Young adults may feel more worried about the consequences and economic hardships of the pandemic, as they are the active labour force in the community and the group most often affected by layoffs and workplace closures.^{11,26,27} While there are studies that have determined the anxiety levels of single people⁸ and married people¹⁹ as high, there are also studies^{17,18} that have reported that there was no difference similar to this study.

There was no difference in anxiety levels in relation to whom the individuals were living with. In the literature, the anxiety levels of those with extended family structure has been reported to be higher than those with nuclear families and those living alone. Wang et al did not find a relationship between the number of individuals living in the same house and anxiety.¹⁸ As supported by some studies in the literature,^{18,24} while no difference was found according to education level, there are studies that have reported that lower level of education^{21,22} and higher level of education^{4,11} were associated with higher anxiety. It

has been reported that secondary school graduates have higher levels of anxiety than undergraduates, and blue-collar workers have higher levels of anxiety than students and white-collar workers.¹² The anxiety levels of private-sector workers were reported to be higher than that of public workers.⁷ However, in this study, no difference was found according to profession and career field. Although high levels of anxiety were reported in studies conducted with healthcare professionals,^{2,3,16,17,19,24} the anxiety levels of healthcare professionals were determined to be similar to other professions and fields of career in this study.

In the literature,¹¹ people who have a relative diagnosed with COVID-19 infection were reported to have a higher level of anxiety. However, no differences with respect to this variable were found in this study. Although it has been reported that those with chronic diseases had higher mortality rates from COVID-19 and experienced higher levels of anxiety,^{13,14,18} no differences were found according to chronic disease status in this study. Considering the damage done to the lungs by the COVID-19 infection, it may not be surprising that the anxiety levels of smokers were higher than that of non-smokers, as found in this study. Türkili et al pointed out no difference in terms of both smoking and chronic disease status.¹⁷

In this study, the anxiety levels of those who reported their working status as already unemployed/not working were found to be higher than those working from home, and those in the low-income earners were found to be higher than those in the middle-income earners. It has been reported in the literature that the anxiety levels of those who do not continue to work were higher than those who continue to work and those who work from home,⁸ and those with low-income had a high level of anxiety compared to those with high-income.²² These results may be related to economic anxieties such as layoffs due to the pandemic and worsening state of the economy. Those who work from home may have a lower level of anxiety, as the risk of contact will be less. As the literature⁹ supports, the anxiety levels of those who did not find Turkey successful in the fight against COVID-19 were found to be higher than those who found it successful. In this study, the anxiety levels of those living in Turkey were found to be higher than those of Turks living abroad. This result might be related to the morbidity and mortality rates of countries, differences in quarantine policies, and COVID-19 news in the national media. In the literature, it has been reported that those who have been more exposed to news about the pandemic on social media or on TV have a high level of anxiety.^{11,19}

Participants frequently reported the following as ways of coping with anxiety: Cognitive coping strategy statements such as “it comforts me to think that I am healthy and safe right now” and “thinking that I can be protected by following the recommendations of the experts gives me relief”, and social support statements such as “talking to my family and friends on the phone makes me feel relieved”. A similar pattern of results found in the present with regards to ways of coping with anxiety was also obtained by mental health professionals who recommended using alternative communication methods such as social networks and digital communication platforms to prevent social isolation, encouraging healthy behaviours, and not being exposed to negative news.²⁰

5.1. Study Limitations

COVID-19-related anxiety results were based on data from the self-report scale. In addition, data cannot be generalized to clinical cases, as they were collected from a clinically asymptomatic sample. Another limitation is the inability to collect data by face-to-face method due to the restrictions in the pandemic process. Finally, the study results are limited to the sample from which the data were obtained.

6. Conclusion

Although anxiety can be seen in all individuals during the pandemic, it may vary according to demographic factors such as age, gender, working style, and smoking. Future studies that could fruitfully explore the effects of the pandemic on individuals and healthcare workers need to be increased. Considering the dimensions of anxiety and

Research Highlights

What Is Already Known?

The COVID-19 pandemic has caused varying levels of anxiety in individuals all over the world. There are more risk factors for COVID-19 to cause anxiety in healthcare workers. Also, individuals use different ways of coping with anxiety.

What Does This Study Add?

This study showed that COVID-19-related anxiety levels of individuals were slightly above the moderate level and the anxiety levels of healthcare workers were not different from others. The COVID-19-related anxiety levels were higher among women, young people, those living in Turkey, those who are already unemployed / not working, those in the low-income earners, and smokers. Therefore, it is recommended to develop health policies that will support these groups psychologically. The ways of coping with anxiety of individuals were cognitive coping, social support, and distraction and relaxation techniques. And these methods should be developed under the supervision of experts.

risk groups, public mental health policies and interventions should be developed to help individuals cope with anxiety.

Conflict of Interest Disclosures

The author declares that they have no conflicts of interest.

Ethical Approval

Ethics committee approval for this study was obtained from a public university (dated 30th April 2020, numbered 121) and from the Turkish Ministry of Health (27th May 2020). A statement posted at the beginning of the questionnaire elucidates the nature of the study, the confidentiality issues, and voluntary participation. Additionally, a volunteer confirmation section was added for participants.

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