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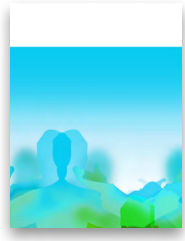

Original Article

The relationship between anxiety and perceived social support during the initial stage of the COVID-19 outbreak

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Abstract

Objectives: The outbreak of coronavirus 2019 (COVID-19) quickly reached pandemic status. The aim of this study was to examine the prevalence of anxiety, the factors affecting anxiety, and the relationship between anxiety and perceived social support during the early period of the pandemic in Türkiye.

Methods: A total of 405 females and 127 males (n=532) were enrolled in the study. The age range of the participants was 18-73 years, with a mean age of 30.95 years. A demographic information form, the Beck Anxiety Inventory, and the Multidimensional Scale of Perceived Social Support were used to collect data using an online format. Since the data did not show normal distribution, the Mann-Whitney U test, the Kruskal-Wallis test, and the Spearman correlation coefficient were utilized in the analysis.

Results: The findings indicated that 77.8% of the individuals participating in the study had a mild level of anxiety, 10.3% demonstrated a moderate level of anxiety, and 11.8% displayed a severe level of anxiety. The female participants had a higher level of anxiety than the male respondents. The anxiety level of those who constantly followed the news about the virus and those who only partially implemented the precautions suggested by the experts was high. The length of time spent at home in self-isolation and changes to work conditions did not create a significant difference in the level of anxiety. A negative correlation was observed between anxiety and perceived social support from family and friends, however, support from another significant person, such as a fiancé, was not significant.

Conclusion: The pandemic had a negative impact on mental health; however, social support played a protective role. Various examples from the literature are provided to provide relevant context.

Keywords: Anxiety; COVID-19; pandemic; perceived social support.

Coronaviruses, a large family of viruses that cause disease in humans and/or animals, can cause a wide range of respiratory tract infections, from the common cold to diseases with greater risk, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).[1] Coronavirus 2019 (COVID-19), which emerged in Wuhan, China, in December 2019, was quickly revealed to be an easily transmitted virus and it spread rapidly.[1] While 80% of cases were mild disease, 20% required hospital treatment. Individuals over the age of 60, those with chronic diseases, and healthcare professionals, were at greatest risk of infection.[2] As of June 3, 2020, 6,272,098 COVID-19 cases had been reported to the World Health Organization, and 379,044 of these reported cases resulted in death.[3] The numbers have continued to grow.

Governments, institutions, and the public were faced with adapting to a new and potentially deadly virus. In addition to concerns about infection, there was the need to manage various measures implemented to inhibit spread of the virus that added significant restrictions to daily life, such as curfews, restructuring work life and the economic consequences thereof, travel and transportation limitations, and numerous uncertainties that could impact mental health.[4] One of the early signs of fear included panic buying of foodstuffs and cleaning products.

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What is presently known on this subject?

- A pandemic can be expected to have a negative effect on mental health, particularly anxiety. Social support plays a protective and therapeutic role in the face of difficult life events.

What does this article add to the existing knowledge?

- The results of this study indicated that 22.1% of individuals had moderate or high levels of anxiety at the beginning of the pandemic and identified factors that affected anxiety (gender, taking adequate precautions, frequency of following the news). It was found that the level of anxiety decreased with greater perceived social support from family and friends.

What are the implications for practice?

- Ensuring that there are strong social support mechanisms in place can protect mental health and mitigate anxiety and other negative psychological consequences of disruptive events, such as a pandemic.

Research conducted related to SARS,[5,6] swine flu,[7] MERS,[8] and Ebola virus[9] outbreaks revealed that the possibility of infection led to an increased likelihood of psychological disorders. Similar studies are needed to examine the reaction to COVID-19, a novel virus that is quite contagious and had more widespread effects than previous epidemics, particularly since this virus has continued to be a global concern. The findings of a systematic review study conducted in China during the early stage of the pandemic indicated that 28.8% of the participants reported symptoms of moderate-severe anxiety, 16.5% reported moderate-severe depression, and 8.1% reported a moderate-severe level of stress.[10] Another systematic review noted a prevalence of stress in 5 studies of 29.6%, an anxiety prevalence of 31.9% in 17 studies, and a prevalence of depression of 33.7% in 14 studies.[11] Research conducted in Italy at the beginning of the pandemic revealed that 17% of the participants had severe depression, 15.4% had very severe depression, 7.2% had severe anxiety, 11.5% had very severe anxiety, 14.6% had severe stress, and 12.6% had very severe symptoms of stress.[12] It was also reported that the prevalence of symptoms of at least moderate depression among university students in Bangladesh was 62.9%, the result for anxiety was 63.6%, and 58.6% for stress early in the COVID-19 outbreak.[13] The results of another study of young adults in the USA showed that 43.3% reported a high level of depression, 45.4% had a high anxiety score, and 31.8% demonstrated a high level of post-traumatic stress disorder (PTSD) symptoms. COVID-19-related worry, loneliness, and low tolerance of distress were associated with the symptoms.[14] In another study conducted in the USA, official recommendations to stay at home were positively associated with greater health anxiety, loneliness, and financial concerns in adults.[15] It is clear that a pandemic can have a significant effect on mental health.

Understanding the factors that support or pose a risk to mental health is a public health imperative. COVID-19-related research has indicated that factors such as gender, age, education level, place of residence, COVID-19 diagnosis in oneself or someone close, work conditions, level of implementation of precautions, media interaction, and physical activity can influence mental health status.[16–18]

A study that examined the causative factors in 69 suicide cases during the pandemic in India found that the most common were fear of COVID-19 infection, financial crisis, and variables related to the difficulties of loneliness and quarantine.[16] The results of a study conducted in Hong Kong indicated that poorer mental health was associated with concerns such as concern about infection and having adequate protection, and the inability to work from home.[17] Practices such as physical distancing and quarantine procedures disrupt social relations and can contribute to feelings of loneliness or inadequate social support.[18] One study noted that 60% of self-isolated individuals stated that their mental health had deteriorated since closure measures were implemented, while 27% reported that it had remained the same, and 13% responded that it had become stronger.[19] Other research has shown that social support from family, friends, romantic partners, and colleagues can play a protective role against effects of physical distance and social isolation measures imposed in response to the COVID-19 pandemic.[15–18,20] In research conducted in Germany, a negative relationship was found between social support and anxiety, depression, and stress.[21] A study of the psychological impact of the pandemic among Egyptian adults revealed that 40.6% stated that they received increased social support from their family during the COVID-19 pandemic, while only 24.1% reported increased support from their friends. Almost half of the participants (46.5%) shared their feelings with their family and 34.5% with others; 64.7% responded that their interest in the feelings of their family members had increased.[22] Individuals with a high level of perceived social support were shown to have a 63% lower risk of depression and a 52% lower risk of poor sleep quality compared with those with low levels of perceived social support.[19] Similarly, research demonstrated low COVID-19-related stress and anxiety levels among Chinese university students who lived with their families and had a high perceived level of social support.[23] Social support from the family has been found to be associated with lower levels of depression and PTSD.[14] A month-long longitudinal study conducted with COVID-19 patients also noted that social support was a predictor of psychological symptoms.[24] The disruption of support systems and constant exposure to the media and other stressors related to COVID-19 were also associated with a deterioration in eating behaviors.[25] Social support reduces psychological discomfort and facilitates adaptation to negative situations.

The first case of COVID-19 in Türkiye was reported on March 11, 2020. The objectives of this research were to investigate the prevalence of anxiety in individuals at the onset of the pandemic, to examine the effect of various variables (gender, opinion of the adequacy of the measures taken, frequency of news tracking, work conditions, and isolation), and to investigate the relationship between anxiety and perceived social support. The research questions were:

1. What is the prevalence of anxiety among individuals during the early stage of the COVID-19 pandemic?

2. What are common anxiety symptoms among individuals during the early stage of the COVID-19 pandemic?
3. Does the level of anxiety among individuals during the early stage of the COVID-19 pandemic differ according to variables (gender, opinion of the adequacy of the measures taken, frequency of news tracking, work conditions, and isolation period)?
4. Is there a relationship between the level of individual anxiety and perceived social support during the early stage of the COVID-19 pandemic?

Materials and Method

Ethical Considerations

The principles of the Declaration of Helsinki were adhered to at all stages of the research. The individuals participating in the study were informed about the study and provided consent. Due to the restrictions in place as a result of the pandemic, information was exchanged with the participants online. They were advised about the purpose of the research, the importance of answering the questions sincerely and honestly, the preservation of confidentiality of information and the use of a collective evaluation, and the right to withdraw from the research. Participants were able to access the research questions once they had confirmed their consent. Names were not recorded to ensure the confidentiality of the participants.

Study Design

This study used a descriptive, cross-sectional model. This format is used to collect data from a population or a representative sample at specific point in time.[26] Variables were observed and evaluated without influence.

Research Population and Sample

The population consisted of individuals aged ≥18 years living in Türkiye at the time of the outbreak of COVID-19. Online tools were used to ensure easy accessibility and the snowball sampling method was used to recruit participants. Individuals under the age of 18 or with cognitive or mental health problems were excluded. The sample consisted of 532 respondents: 405 females and 127 males. The age range of the participants was 18-73 years, with a mean age of 30.95 years. The formal education level of 12 of the participants was primary school, 18 had a primary/secondary school education, 81 high school, 370 undergraduate, 45 graduate, and 6 had a doctorate degree.

Data Collection Tools

A demographic information form designed for the study, the Beck Anxiety Inventory (BAI), and the Multidimensional Scale of Perceived Social Support (MSPSS) were used to collect research data.

Demographic Information Form: The researchers created a form consisting of 17 questions to probe the response to pandemic conditions and to collect individual characteristics, such as age, gender, province of residence, education level, occupation, and living circumstances. Items designed to assess the reaction to the pandemic circumstances included queries related to implementation of measures recommended by experts, sources of information about the pandemic, and the frequency of following news and information.

Beck Anxiety Inventory: A validity and reliability study of a Turkish version of the Beck Anxiety Inventory (BAI) originally developed by Beck et al.[27] was performed by Ulusoy et al.[28] Each of the 21 items is scored between 0-3, yielding a total score of 0-63. A score of 0-17 indicates mild anxiety, 18-25 points suggests moderate anxiety, and ≥26 points indicates a high anxiety level. The Cronbach alpha coefficient of the scale reported by Ulusoy et al. was 0.92 and our results similarly indicated excellent consistency with a value of 0.94.

Multidimensional Scale of Perceived Social Support: The Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al.[29] is a 12-item measure of perceived adequacy of social support from 3 sources: family, friends, and a significant other. A validity and reliability study of a Turkish version was conducted by Eker and Arkar.[30] The instrument uses a 7-point, Likert-type scale (1=strongly disagree, 7=strongly agree). Three subscales consisting of 4 items are used to evaluate support from family, friends, and a special person/significant other. The range of the possible subscale scores is 4-28, yielding a total possible score of 12-84. A high score indicates a high level of perceived social support. The Cronbach alpha coefficient of the scale was 0.90 in the validity study, and it was found to be 0.87 in the current study.

Data Collection Process

The data in the study were collected March 24-26, 2020, shortly after the first reported case of COVID-19 in Türkiye. The research data were shared with several social media accounts and groups and collected online using a Google docs link (Google LLC, Mountain View, CA, USA) and the WhatsApp messaging service (WhatsApp LLC, Menlo Park, CA, USA).

Statistical Analysis

IBM SPSS Statistics for Windows, Version 25.0 software (IBM Corp., Armonk, NY, USA) was used to analyze the data. Frequency analysis was performed to determine the prevalence of anxiety according to the BAI scores. Normality of distribution testing using skewness and kurtosis values revealed non-normal distribution. Data transformation can be used to bring the data closer to normal.[31] LOG10 data transformation was applied, but the distribution of the data remained non-normal. Therefore, nonparametric statistical methods were used in the analysis. Comparison between groups of the dependent variable with an independent variable was conducted

using the Mann-Whitney U test (gender and opinions of the adequacy of measures taken), and the Kruskal-Wallis Test was used if there were >2 groups. The relationship between anxiety and perceived social support was evaluated using the Spearman rank correlation coefficient (r).

Results

Characteristics of the Participants

Of the respondents, 94.7% (n=504) stated that they lived with family members, 3.2% (n=17) lived alone, and 1.9% (n=10) lived with friends. In all, 29.7% (n=158) started working from home after the emergence of the pandemic, 27.1% (n=144) took leave, 12% (n=64) continued to go to work, and 7.7% (n=41) indicated that they had been dismissed. Among the participants, 26.9% (n=143) replied that they obtained information about the COVID-19 pandemic from the internet/social media, 7.7% (n=41) from television, and 51.5% (n=274) used both internet/social media and television. When asked about information tracking habits, 30.5% (n=162) indicated that they constantly checked news sources, 20.9% (n=111) responded that they checked every 1-2 hours, 21.1% (n=112) every 3-4 hours, and 25.6% (n=136) 1-2 times a day, and 2.1% (n=11) said that they never looked at news sources. In addition, 83.8% (n=446) responded that they employed the measures recommended by experts to protect themselves, 47.6% (n=254) utilized physical isolation and 47.7% used cleaning and hygiene measures. While 48.1% (n=256) of the participants found the measures they employed to be sufficient, 47.1% (n=255) reported that they were only partially sufficient. Responses also indicated that 3.4% (n=18) of the participants had been in self-isolation for <5 days, 27.6% (n=147) for 5-9 days, 23.1% (n=123) for 10 days, and 21.2% (n=113) for 11-16 days. These findings are presented in Table 1.

Table 1. Characteristics of the participants

Variables	Responses	n	%
Residential conditions	Alone	17	3.2
	Family	504	94.7
	Friend(s)	10	1.9
Work	Going to work	64	12
	Working from home	158	29.7
	Taking leave	144	27.1
	Dismissal	41	7.7
News sources	Internet/social media	143	26.9
	TV	41	7.7
	Both	274	51.5
Frequency of checking news sources	Constantly checking	162	30.5
	1-2 hours	111	20.9
	3-4 hours	112	21.2
	1-2 times a day	136	25.6
	Never	11	2.1
Following precautions recommended by experts	Yes	446	83.8
	Partially	81	15.2
	No	5	0.9
The most used precautionary measure	Physical isolation	253	47.6
	Cleaning and hygiene	254	47.7
	Healthy eating	23	4.3
	Exercise	2	0.4
Finding measures taken to be adequate	Yes	256	48.1
	Partially	255	47.1
	No	21	3.9
Number of days of self-isolation	<5 days	18	3.4
	5-9 days	147	27.6
	10 days	123	23.1
	11-16 days	113	21.2

Frequency Distribution of Anxiety Scores

The BAI score of 77.8% (n=414) of study participants indicated a mild level of anxiety, 10.3% (n=55) demonstrated a moderate level, and 11.8% (n=63) a high level of anxiety. The frequency distribution of the scores is shown in Table 2.

Table 2. Anxiety level based on Beck Anxiety Inventory score

Level of anxiety	n	%
Mild	414	77.8
Moderate	55	10.3
High	63	11.8

The frequency distribution of symptoms of severe discomfort ("It bothered me a lot") was examined in groups with mild (0-17 points), moderate (18-25 points), and high (≥26 points) BAI scores. The response related to a fear of the worst happening was the most common, observed in 7.5% (n=31) of the group with a mild anxiety score, 32.7% (n=18) in the moderate group, and 73% (n=46) of the group with a high score. In the group with a moderate anxiety score, being scared received an equal response (32.7%, n=18), while 66.7% (n=42) of those with severe anxiety responded that they were scared. Irritability was seen in 4.8% (n=20) of the mild anxiety group, 30.9% (n=17) of the moderate group, and 55.6% (n=35) of the severe group. The representation of those who reported being terrified was significant in the moderate group: 4.3% (n=18). It was also found that 3.9% (n=16) of the group with a mild anxiety score, 14.5% (n=8) of the moderate group, and 50.8% (n=32) of the severe anxiety group had a fear of dying. The full results are presented in Table 3.

Anxiety Level According to Various Variables

The Mann-Whitney U test was used to examine whether the anxiety level of individuals in the early stage of the COVID-19 pandemic differed in terms of gender or opinion regarding the sufficiency of measures they had taken in response to the pandemic indicated that there was a difference according to gender

Table 3. Beck Anxiety Inventory score distribution

Item	Mild		Moderate		High	
	n	%	n	%	n	%
1. Numbness or tingling	4	1	0	0	4	6.3
2. Feeling hot/hot flashes	1	0.2	1	1.8	9	14.3
3. Weakness/wobbliness in legs	7	1.7	1	1.8	3	4.8
4. Unable to relax	4	1	8	14.5	20	31.7
5. Fear that the worst will happen	31	7.5	18	32.7	46	73
6. Dizziness or lightheadedness	1	0.2	4	7.3	16	25.4
7. Heart pounding/racing	14	3.4	1	1.8	15	23.8
8. Feeling unsteady	2	0.5	1	1.8	13	20.6
9. Terrified	11	2.7	11	20	31	49.2
10. Irritability	20	4.8	17	30.9	35	55.6
11. Feeling of choking/drowning	5	1.2	2	3.6	27	42.9
12. Trembling hands	4	1	4	7.3	7	11.1
13. Shaky/unsteady	1	0.2	1	1.8	2	3.2
14. Fear of losing control	1	0.2	7	12.7	24	38.1
15. Difficulty breathing	1	0.2	2	3.6	1	1.6
16. Fear of death	16	3.9	8	14.5	32	50.8
17. Scared	18	4.3	18	32.7	42	66.7
18. Indigestion	2	0.5	6	10.9	17	27
19. Faintness/light-headedness	1	0.2	1	1.8	1	1.6
20. Face flushing	2	0.5	1	1.8	12	19
21. Hot/cold sweats	1	0.2	1	1.8	6	9.5

Table 4. Comparison of anxiety level in terms of gender and implementation of recommended protective measures

Variable	N	SO	ST	U	z	P
Female	405	294.24	119166.50	14483.500	-7.440	.000
Male	127	178.04	22611.50			
Sufficient measures	256	234.94	60144.50	27248.500	-3.234	.001
Partially sufficient measures	255	277.14	70671.50			

(U=14483.500; p=.000). The anxiety score of women (X=294.24) was higher than that of men (X=178.04). Views about the sufficiency of measures also revealed a difference (U=27248.500; p=.001). The anxiety scores of those who responded that the measures they took were partially sufficient (X=277.14) were higher than those who regarded the steps they took to be adequate (X=234.94). These findings are illustrated in Table 4.

The Kruskal-Wallis test was used to examine whether the anxiety level of the participants differed according to frequency of following the news about COVID-19, the number of days at home, and work conditions related to isolation. A significant difference in anxiety scores was observed according to the frequency of following news of the pandemic (X^2=12.854; p<.05). Those who followed the news constantly (X=285.28) had a higher anxiety score than those who followed news developments every 1-2 hours (X=268.67), those who checked every 3-4 hours (X=263.43), and those who followed up on pandemic news 1-2 times a day (X=223.82). Those who followed the news constantly had the highest anxiety score. Evaluation of the number of days spent at home in self-isolation based on advisories revealed that although the mean anxiety score of individuals who had self-isolated for 11-16 days (X=211.36) was the highest, the difference was not significant (X^2=1.302; p>.05). Although the mean anxiety score of those working from home was the lowest, there was no significant difference in the anxiety level according to changes in working conditions (X^2=1.869; p>.05). The findings are presented in Table 5.

Relationship Between Anxiety and Perceived Social Support (Family, Friends, Special Person)

The Spearman rank correlation coefficient (r) analysis revealed a weak correlation between anxiety (r=-.165; p<.01) and per-

Table 5. Comparison of anxiety level in terms of frequency of following news, self-isolation, and work conditions

Variable	Duration	N	SO	X^2	P
Frequency of following news	Constantly	162	285.28	12.854	.005
	Every 1-2 hours	111	268.67		
	Every 3-4 hours	112	263.43		
	1-2 times a day	136	223.82		
Self-isolation	1-9 days	165	195.72	1.302	.522
	10 days	123	198.56		
	11-16 days	113	211.36		
Work conditions	Going to work	64	207.38	1.869	.600
	Working from home	158	194.16		
	Taking leave	144	211.53		
	Dismissal	41	210.21		

Table 6. Spearman rho analysis

Scale scores	Anxiety	Family	Friend	Special person
Anxiety	1	-.165**	-.094*	-.042
Family		1	.503**	.502**
Friend			1	.506**
Special person				1

ceived friend support (r=-.094; p<.05). As perceived family and friend support increased, the level of anxiety decreased. The findings did not indicate any significant relationship between the level of anxiety and the perceived support of a special person (significant other). The strongest relationship was in perceived family support. The results of the analysis are presented in Table 6.

Discussion

The public was faced with substantial risk, uncertainty, and disruption as a result of the emergence of an unknown and very transmissible virus that became a global threat. This research examined the prevalence of anxiety and the factors affecting anxiety in individuals at the beginning of the pandemic. The anxiety score of the participants showed that 77.8% had mild anxiety, 10.3% had moderate anxiety, and 11.8% had high anxiety. Fear and irritability were the most common symptoms. The results indicated that 50.8% of the group with a high anxiety score had a fear of dying; a heightened level of anxiety was associated with the fear of dying. In a study conducted in Germany at the beginning of the COVID-19 pandemic, more than 50% of the participants stated that they experienced anxiety and psychological distress.[32] A study conducted in Portugal noted that 49.2% of respondents reported a moderate or severe psychological impact as a result of the outbreak. Moderate-severe depression was found in 11.7% of the participants, anxiety in 16.9%, and stress in 5.6% of the sample.[33] In a study conducted in Spain, moderate-severe anxiety was found in 25% of the participants, depression in 41%, and stress in 41%.[34] In Hong Kong, 25.4% of participants in a study stated that their mental health had deteriorated since the pandemic emerged. Depression was recorded in 19% and anxiety in 14%.[17] In a study conducted in China, the authors found no significant longitudinal changes in stress, anxiety and depression levels, but also noted the value of protective factors, such as confidence in healthcare staff.[35]

The analyses revealed that women's anxiety scores were higher than those of men. Several studies conducted during the pandemic have indicated that women's levels of anxiety, depression, loneliness, and anger were higher than those of men.[35–38] A systematic review of 19 studies conducted in 8 countries, including Türkiye, also found that women had higher levels of anxiety.[39] The number of female participants in this study was almost 3 times the number of male participants, which may have affected the results of the analysis. The impact of assigned gender roles should not be underestimated when examining the effects of stress and other circumstances. Women often have the role of a family caretaker, and stay-at-home orders increased this burden. Children were schooled at home; adults worked from home, or had to contend with the threat of infection, and some could not work at all; relatives could not be visited; and there were numerous other disruptions that increased potential sources of anxiety and simultaneously reduced the opportunity to benefit from social relationships.

Implementation of the measures recommended by experts in order to protect against the COVID-19 pandemic had a protective effect on mental health. It was found that the anxiety scores of those who regarded the measures they implemented to be partially sufficient were higher than those who found them fully sufficient. The responses indicated that 47.6% of the participants observed physical isolation and 47.7% reported cleaning and hygiene measures. In a study conducted in Saudi Arabia, 89.7% stated that they washed their hands regularly, 67% did not shake hands, 58.9% maintained physical distance from others, 23.4% avoided sharing kitchen utensils, and 16.9% wore masks. Another 7.2% reported that they did not do anything to protect themselves. The depression subscore of the Depression Anxiety Stress Scale among those who washed their hands frequently and the anxiety and stress scores of those who implemented physical distance rules were lower.[37] Other research has also found that those who washed their hands with soap, washed their hands after coughing, washed their hands after touching a potentially contaminated object, and frequently wore masks had lower levels of anxiety and depression.[35,38]

According to Maslow's hierarchy of needs, security ranks after basic physical needs, such as eating and drinking. The Turkish Ministry of Health shared a list of 14 rules to reduce the risk of COVID-19 infection and spread a message to the public that the "coronavirus is not stronger than the measures you take." The sense of greater safety and control provided by observing the rules can reduce anxiety.

Exposure to social media also has an effect on mental health. In this study, it was found that those who followed the news about COVID-19 constantly had a higher level of anxiety than those who tracked the news less frequently. The rapid spread of information in the age of mobile phones and the internet can trigger feelings of anxiety and panic. In a study conducted in Egypt, it was noted that watching and reading COVID-19 news for more >2 hours a day was associated with symptoms of severe to very severe depression, anxiety, and stress.[36] Dr. Steven Stosny has called the psychological discomfort caused by excessive exposure to the news "headline stress disorder." It was defined by a heightened emotional reaction, such as anxiety or stress, in response to constant media reporting.[40] However, media exposure also has positive effects, such as providing information and guidance. While updates on the severity of the pandemic have been associated with negative emotions, anxiety, and stress, seeing stories of heroic acts, listening to the speeches of experts, and obtaining information about ways to prevent infection have been associated with positive emotions and less depression.[41] Another study conducted in China examined the impact of media coverage, and the results indicated that most of the general public thought that there was excessive unofficial news about COVID-19 and that it was unreliable, recommending that the government take some control of the unofficial news and provide timely information to the public.[42]

Of the participants in this study, 29.7% (n=158) started working from home after the pandemic emerged, 27.1% (n=144) took leave, 12% (n=64) continued to go to work, and 7.7% (n=41) reported that they had been dismissed from their job. The anxiety level of the group working from home was the lowest, though the difference was not significant. Messages to stay at home and stay safe likely provided a sense of security. This suggests that the measures taken to reduce the spread of the pandemic had positive effects on mental health. A study conducted in Hong Kong showed that not being able to work from home was among the concerns associated with poorer psychological health.[17] Abrupt and drastic changes to individual working conditions and the economy are threats to mental health. A study conducted in Spain at the beginning of the pandemic noted that those who had lost their job demonstrated the strongest negative psychological symptoms. Fear of suffering an economic crisis as a result of the pandemic was the greatest worry.[34]

Prolonged isolation due to the pandemic also poses a threat to mental health. Although we found no significant difference in anxiety scores according to the time spent at home, the anxiety score of the group whose had self-isolated for 11-16 days was high. A study conducted in the Philippines noted that the anxiety and depression symptoms of employees who continued to go to work because their employment addressed basic public needs were lower than those who stayed at home for 20-24 hours a day.[38] The results of another study in which 56.4% of the participants stated that they applied very strict self-isolation and never went out and 38.1% spent at least 12 hours a day at home, there was not significant relationship between the time spent at home and depression, anxiety and stress.[32] Individual circumstances and psychological health, among other factors, will contribute to the effect, however, extended isolation generally has negative effect on mental health.

The analysis related to the third objective of the research revealed that social support, especially from family and friends, had an important role in overcoming difficult life events. Individuals with high levels of support from family and friends demonstrated lower levels of anxiety. Support from a special person, such as a fiancé or a lover, did not significantly impact the anxiety score. In Germany, concerns about social consequences of the COVID-19 pandemic (61.2%) outweighed economic concerns (47.3%).[32] In Egypt, the lack of emotional support from family was associated with depression, anxiety, and stress.[36] The social support that an individual receives from important people in their life provides some protection from the harmful effects of loneliness and anxiety. Perceived social support was shown to consistently moderate the relationship between loneliness and both chronic anxiety and COVID-19 anxiety.[43] A study conducted in Türkiye found a negative relationship between perceived social support from family, friends, and a special person, and state and trait anxiety.[44] In addition, social support, psychological resilience, and coping strategies had a mediating role in the relationship between

COVID-19-induced stress and acute stress disorder.[45] Family relationships are often the greatest source of strength.

The vital role of mental health workers becomes especially evident during crises such as a pandemic. Psychosocial intervention studies conducted with SARS patients showed that certain behavioral and verbal responses of healthcare workers relieved psychological distress in the acute phase.[46] A study of COVID-19 patients who were given 15-30 minutes of psychological intervention 3 times a week for 2 weeks via face-to-face or online meetings that included techniques of listening, positive focus, supportive psychotherapy, empathy, body and breath relaxation, and cognitive-behavioral therapy, disclosed that after the intervention, the patients' depression and anxiety levels had decreased and their sleep quality had increased.[24] Supportive statements from mental health workers, as well as from family, friends, and colleagues, can help to alleviate symptoms of psychological disorders and can contribute to a more positive mood.

Early detection of symptoms related to psychological disorders can lead to more effective interventions. Psychosocial intervention programs can be of great benefit. During the pandemic, they were used to help the public cope with factors such as fear of infection, quarantine limitations, and economic difficulties. Greater use of online services was required due to the circumstances limiting in-person interaction. It is important that psychiatric nurses have the appropriate professional knowledge and skills to provide psychological help on online platforms. Use of this format could prove beneficial beyond the pandemic.

This research has some limitations. The first is that the data were collected over a 2-day period (a cross-sectional study) early in the pandemic and no longitudinal follow-up was performed. The effects of the pandemic may have increased over time. Future studies of the long-term effects of the pandemic will be valuable. Another limitation of the study is that due to the pandemic conditions, the data were collected online, rather than in face-to-face visits. Therefore, participation was limited to individuals who had access to and familiarity with the internet. The majority of the participants (79.1%) had an undergraduate, graduate, or doctoral level education; therefore, it is difficult to generalize the research findings to a broader population. Since it was not possible to determine how many people received the questionnaire, the rate of participation could not be measured. In addition, the measurement tools used in the study were self-report instruments. Evaluations based on self-report are less valid and reliable than clinical evaluations. Social-desirability bias is also a consideration. While collecting data online provides the opportunity to reach more participants, it increases the possibility of inaccurate information. This research is correlational and does not provide information about cause-effect relationships. The small number of male participants is another limitation that prevents generalization of the findings.

Conclusion

The COVID-19 pandemic had a negative effect on anxiety. Gender, the frequency of following the news, and the level of application of precautions were among the factors that had an effect. While perceived support from family and friends was negatively related to anxiety, perceived support from other special individuals, such as a significant other or a fiancé, was not associated with a significant difference in anxiety. This study was carried out during the initial phase of the COVID-19 pandemic. Evaluation of long-term effects and determining protective factors is important to understanding current circumstances and to efforts to address future needs. This study only examined the level of anxiety and the factors affecting anxiety; future studies that evaluate other psychological effects, such as depression, PTSD, and suicide will be useful. In addition, the effect of age may also be an interesting subject for additional research. Longitudinal studies would provide important findings for future application.

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