



PSYCHOLOGICAL EFFECTS AND PSYCHOLOGICAL RESILIENCE OF THE COVID-19 OUTBREAK IN TURKEY

TÜRKİYE'DEKİ COVID-19 SALGINININ PSİKOLOJİK ETKİLERİ VE PSİKOLOJİK DAYANIKLILIĞI

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Abstract

The population of the cross-sectional and descriptive study consisted of individuals living in Turkey between 19 May and 19 July 2020. Due to the pandemic, 3035 people who agreed to participate in the research were reached via online survey method. Sociodemographic data form and Beck's Anxiety Inventory were used as data collection tools. 59.1% of the participants in the study are women and the average age is 35.16±13.4. 0.8% of individuals stated that they were infected with coronavirus, 21.4% stated that they had a family member or close circle affected by coronavirus disease, 6.3% stated that they had relatives who died from this disease, and 9.9% stated that they applied for quarantine as a suspected patient. While 89.3% of individuals stated that they stayed at home, 79.2% stated that they had been away from home for the last two weeks. It was found that the mean scores of Beck's Anxiety Inventory were higher in women, those in the older age group, those who were married, those with higher education levels, and those who perceived their socioeconomic status as low. In this study, it was determined that individuals living in Turkey experienced high levels of anxiety due to coronavirus.

Keywords: COVID-19, Outbreak, Psychology, Psychological Resilience, Turkey

Öz

Kesitsel ve tanımlayıcı tipte olan araştırmanın evrenini 19 Mayıs-19 Temmuz 2020 tarihleri arasında Türkiye'de yaşayan bireyler oluşturmuştur. Pandemi nedeniyle online anket yöntemi ile araştırmaya katılmayı kabul eden 3035 kişiye ulaşılmıştır. Veri toplama aracı olarak sosyodemografik veri formu ve Beck's Anksiyete Envanteri kullanılmıştır. Araştırmaya katılanların %59,1'i kadın olup, yaş ortalaması 35,16±13,4'tür. Bireylerin %0,8'i koronavirüse yakalandığını, %21,4'ü ailesinde veya yakın çevresinde koronavirüs hastalığından etkilenen olduğunu, %6,3'ü bu hastalıktan ölen akrabaları olduğunu ve %9,9'u şüpheli hasta olarak karantinaya başvurduğunu belirtmiştir. Bireylerin %89,3'ü evde kaldığını belirtirken, %79,2'si son iki haftadır ev dışında olduğunu belirtmiştir. Kadınlarda, ileri yaş grubundakilerde, evlilerde, eğitim düzeyi yüksek olanlarda ve sosyoekonomik durumunu düşük algılayanlarda Beck's Anksiyete Envanteri puan ortalamalarının daha yüksek olduğu bulunmuştur. Bu çalışmada, Türkiye'de yaşayan bireylerin koronavirüs nedeniyle yüksek düzeyde kaygı yaşadıkları tespit edilmiştir.

Anahtar Kelimeler: COVID-19, Salgın, Psikoloji, Psikolojik Dayanıklılık, Türkiye

GENİŞLETİLMİŞ ÖZET

Çalışmanın Amacı

Bu çalışmanın amacı, COVID-19 salgınının Türkiye'de yaşayan bireyler üzerindeki psikolojik etkilerini ve psikolojik dayanıklılığını belirlemektir.

Araştırma Soruları

COVID-19 salgınının Türkiye'de yaşayan bireyler üzerindeki sağlık-sosyal-ekonomik-psikolojik etkileri ve psikolojik dayanıklılıkları nelerdir?

Literatür Araştırması

Salgının ilk günlerinde virüsün fiziksel sonuçları daha fazla ilgi görmüş ve ruh sağlığı sonuçları üzerinde durulmamıştır. Ancak özellikle salgının ortaya çıkması ve vaka sayılarının artması sırasında bireylerin korku, kaygı ve stres düzeylerinin arttığını algıladıkları gözlemlenmiştir (Rajkumar, 2020). Pandemi döneminde kişilerin göstereceği psikolojik tepkiler değişkenlik göstermektedir. Bazı bireyler kaygı duymadan gerekli önlemleri almakta isteksiz davranırken, bazı bireylerde bu durum aşırı kaygı ve buna bağlı olarak olumsuz mesleki ya da akademik etkiler şeklinde kendini göstermektedir. Pandemi sürecinde bireyler özellikle kaygı ve duygudurum bozukluklarına yatkın olabilirler (Elli, 2020). Pandemi sonrası dünyanın artık eskisi gibi olmayacağı, insanlıkta birçok şeyin değişeceği ve dünyanın yeni bir döneme gireceği söylemlerinde artış olmuştur. Dolayısıyla tüm dünyayı etkileyen bu durumun köklü siyasi, ekonomik ve sosyal sonuçları olması kaçınılmaz olacaktır (Özatay ve Sak, 2020). COVID-19 salgını sırasında bireylerin psikolojisi ve davranışları hastalığa tepkisini etkilemekte, salgın sırasındaki davranışları da salgının yayılmasında ve can kaybında rol oynamaktadır. Bu nedenle bireylerin psikolojisini ve davranışlarını bilmek ve doğru şekilde yönetmek salgınla mücadele açısından büyük önem taşımaktadır (Aslan, 2020). Pandemi dönemlerinde bu sürecin sağlıklı yönetilebilmesi için toplumun ruh sağlığı için tıbbi müdahalenin yanı sıra planlı ve organize psikososyal destek hizmetlerine ihtiyaç duyulmaktadır (Karataş, 2020).

Yöntem

Kesitsel ve tanımlayıcı çalışmanın verileri, COVID-19 salgınının psikolojik etkilerini analiz etmek için 19 Mayıs - 19 Temmuz 2020 tarihleri arasında toplanmıştır. Araştırmanın evreni Türkiye'nin yedi bölgesinde yaşayan bireylerden oluşmuştur. COVID-19 salgını nedeniyle online anket yöntemi kullanılarak araştırmaya katılmayı kabul eden 3035 kişiye ulaşılmıştır. Türk Hükümeti, pandeminin daha fazla yayılmasını önlemek için vatandaşların evde kalarak yüz yüze etkileşimi en aza indirmelerini tavsiye ettiğinden (20 yaş altı ve 65 yaş üstü için sokağa çıkma yasağı ile), bu çalışmanın araştırmacıları, gönüllü katılımcıları entegre etmek için web tabanlı bir anket tasarlamıştır. Anket sorularının yanıtları, katılımcıların masaüstü veya dizüstü bilgisayarlar, tabletler ve mobil cihazlar (Whatsapp, Instagram ve Facebook aracılığıyla) dahil olmak üzere elektronik cihazlarında yapılan çevrimiçi toplantılardan toplanmıştır. Veriler, sosyodemografik soru formu ve Beck Anksiyete

Envanteri kullanılarak toplanmıştır. Katılımcılarla paylaşılan anketin ilk bölümünde bu çalışmanın kapsamı ve amacı belirtilmiş ve bu araştırmaya katılımın gönüllülük esasına dayalı olduğu not edilmiştir. Dahil edilme kriterleri 18 yaş ve üzerinde olmak ve araştırmaya katılmaya istekli olmaktır. Veri toplama aracı sosyodemografik özellikler, COVID-19 salgını, salgının sağlık-sosyal-ekonomik-psikolojik etkileri, psikolojik dayanıklılıkları ve Beck's Anksiyete Envanteri (BAI) ile ilgili sorulardan oluşmuştur. Çalışmadan elde edilen veriler Statistical Package for Social Sciences (SPSS) for Windows 22.0 programı kullanılarak analiz edilmiştir. Veriler değerlendirilirken tanımlayıcı istatistiksel yöntemler (sayı, yüzde, ortalama, standart sapma) kullanılmıştır. Verilerin normal dağılıma uygunluğu Kolmogorov Smirnov testi ile değerlendirilmiştir. Verilerin analizinde normal dağılım varsayımı sağlandığında bağımsız gruplarda t testi ve ANOVA, normal dağılım göstermeyen verilerde Mann Whitney U ve Kruskal Wallis testi kullanılmıştır. Tüm testlerde istatistiksel anlamlılık düzeyi 0.05 olarak alınmıştır.

Sonuç ve Değerlendirme

Bu çalışmadan elde edilen verilere göre Türkiye'de yaşayan bireyler COVID-19 salgını nedeniyle yüksek düzeyde kaygı yaşamaktadır. Kadınlarda, ileri yaş bireylerde, evlilerde, eğitim düzeyi yüksek olanlarda ve sosyoekonomik statüsünü düşük algılayanlarda daha yüksek anksiyete bulunmuştur. Salgın sürecinde daha fazla stres yaşayan kadınların, evlilerin, yaşlıların, eğitim düzeyi yüksek ve sosyoekonomik düzeyi düşük kişilerin psikolojik dayanıklılıkları artırılmalıdır. Bireyler bilgi kirliliğinden kaçınmalı, Türkiye Cumhuriyeti Sağlık Bakanlığı, Türk Toraks Derneği, KIZILAY, TTB, HASUDER, KLİMİK ve KLİMUD (Türkiye'deki isimleri) güvenilir bilgi kaynakları olan web sitelerini ziyaret etmeli ve uzmanlardan profesyonel destek almalıdır.

1. INTRODUCTION

COVID-19, an infectious disease caused by the SARS-CoV-2 virus, defined as a severe acute respiratory syndrome, was declared a global pandemic by the WHO on March 11, 2020. COVID-19 was first seen on in Turkey 11 March 2020 and certain restrictions were placed due to its pandemic status (Baltacı and Coşar, 2020; Budak and Korkmaz, 2020). From 19 July 2020, when the period of product addition of the study was terminated, the total number of COVID-19 cases in the world was 14.429.382 and 604.963 people had died. (Coronavirus Resource Centre, 2020). The total number of COVID-19 cases in Turkey at the same date was 219.641, and the number of people who lost their lives was 5.491 (Türkiye Cumhuriyeti Sağlık Bakanlığı, 2020a).

Pandemics are not only an important public health problem but also a social phenomenon that affects society in many ways causing social deterioration. Pandemics cause health problems in individuals in two ways. The first of these is the physical effects caused by the contamination of the virus, and the other is the mental health problems that are caused by the effects of the epidemic, such as anxiety, stress and depression, which include healthy individuals who are not affected by the virus. The restrictions imposed due to the pandemic and the changing of daily life has started to affect the mental health of individuals. At the same time, the tragic consequence of the failure to perform cultural and religious rituals of deaths and the incomplete mourning process during this period negatively affects the mental health of individuals. Individuals who experience panic and stress as a result of the increased threat perception created by the pandemic exhibit different behaviors than normal. How the emotional and psychosocial effects that occur in the face of uncertainties and crises during pandemic periods are managed and overcome are important topics for the individual and society. At the same time, the pandemic period affects our present due to the potential risks it has, as well as damaging the sense of hope and confidence for the future (Baltacı and Coşar, 2020; Bozkurt et al., 2020; Karataş, 2020).

The physical consequences of the virus in the early days of the epidemic attracted more attention, and mental health consequences were not emphasized. However, it has been observed that individuals perceive increased levels of fear, anxiety, and stress, especially during the emergence of the epidemic and the increase in the number of cases (Rajkumar, 2020). The psychological reactions that people will show during the pandemic period vary. While some individuals are reluctant to take the necessary precautions without any anxiety, in some individuals this situation manifests itself as excessive anxiety and consequently, adverse professional or academic effects. During the pandemic process, individuals may be particularly prone to anxiety and mood disorders (Elli, 2020).

After the pandemic, there has been an increase in discourses that the world will no longer be the place it used to be, that many things will change in humanity and the world will enter a new era. Therefore, it will be inevitable that this situation, which affects the whole world, has deep-rooted

political, economic, and social consequences (Ozatay and Sak, 2020). During the COVID-19 outbreak, the psychology and behavior of individuals affect the response to the disease, and the behaviors during the epidemic also play a role in the spread of the epidemic and loss of life. For this reason, it is of great importance in terms of combating the epidemic to know the psychology and behavior of individuals and to manage them correctly (Aslan, 2020). In order to manage this process properly during pandemic periods, planned and organized psychosocial support services, as well as medical intervention, are needed for the mental health of society (Karataş, 2020).

The coronavirus is a new virus and has caused a lot of information pollution in the press and social media, ever since its first days, and this situation has increased the anxiety of individuals. Official institutions and organizations in Turkey provide coronavirus related information for health care workers and the public through their webpages. Web addresses of these institutions and organizations are as follows: Republic of Turkey Ministry of Health: <https://covid19.saglik.gov.tr/>; KIZILAY: <https://www.kizilay.org.tr/corona/>; Turkish Medical Association (TTB): <https://www.ttb.org.tr/kollar/COVID19/>; Public Health Professionals Association (HASUDER): <https://korona.hasuder.org.tr/>; Turkish Society of Clinical Microbiology and Infectious Diseases (KLİMİK): <https://www.klimik.org.tr/koronavirus/>; Clinical Microbiology Specialist Association (KLİMUD): <http://www.klimudkoronavirus.org/> and Turkish Thoracic Society: <https://toraks.org.tr/site/community/news/5718>.

Every individual in society should take the coronavirus seriously and pay more attention to mask, distance and hygiene than ever. As a result of the spread of the epidemic, the current workload of healthcare workers may increase in further during the outbreak. Community participation is very important in health management to combat the epidemic. Therefore, the only way to be successful in combating the epidemic is the active participation of society in this process. Each individual must fulfill their responsibilities. Thus, allowing for the health and psychology of the individual, the family, and society to improve. This research is a cross-sectional and descriptive study aimed at evaluating the COVID-19 outbreak on a population basis. The study aims to determine the psychological effects and psychological resilience of the epidemic on individuals living in Turkey and offer solutions to them.

2.METHODS

2.1. Participants

Data of the cross-sectional and descriptive study were collected between 19 May to 19 July 2020, to analyze the psychological effects of the COVID-19 outbreak. The study population consisted of individuals living in seven regions of Turkey. 3035 people who agreed to participate in the study were reached by using the online survey method due to the COVID-19 outbreak. Informed consent of all the participants was obtained before the voluntary study. As the Turkish Government recommended that citizens minimize face-to-face interaction by staying at home in an effort to prevent

the further spread of the pandemic (with a curfew for those below age 20 and above age 65), researchers of this study had to design a web-based survey to integrate voluntary participants. Answers for the survey questions were collected from online meetings on participants' electronic devices, including desktops or laptop computers, tablets, and mobile devices (via Whatsapp, Instagram, and Facebook).

2.2.Measures

Data were collected using the sociodemographic question form and Beck's Anxiety Inventory. In the first part of the survey shared with participants, the scope and aim of this study were provided, and it was noted that participation in this study was on a voluntary basis. In the survey, the identity data of the participants were not recorded. The inclusion criteria were as follows: being at age 18 and above and willing to participate in the study. The data collection tool consisted of questions on sociodemographic characteristics, the COVID-19 outbreak, health-social-economic-psychological effects of the outbreak, and Beck's Anxiety Inventory (BAI). The average time spent on completing the data collection forms was 3 min.

2.3. Questionnaire Form

In the sociodemographic questionnaire form, questions were related to gender, age, marital status, educational status and sosyo-economic status perception. Other questions were related to aspects such as the participant's staying at home, not going out for the last 2 weeks, washing hands, wearing a mask, catching COVID-19, individuals in family and/or family circle catching COVID-19, having relatives dying of COVID-19, applying quarantine, using public transport, traveling, anxiety about job loss, having a relative at the age of 60 and above at home and health-social-economic-psychological effects of the outbreak

2.3.Beck's Anxiety

Inventory The BAI, developed by Beck, Epstein, Brown, and Steer (1988), is used to determine the frequency of anxiety symptoms (Beck et al.,1988). The reliability and validity study of the inventory in Turkey was conducted by Ulusoy, Sahin, and Erkmen (1998) in 1998 (Ulusoy et al.,1998). The cronbach's alpha value of the inventory, whose validity and reliability analysis was made, was found to be 0.90. In this study, its cronbach's alpha reliability coefficient was found to be 0.92. The inventory consists of 21 items, and each item is a Likert-type scale scored between 0 and 3. The highest score that can be obtained from the scale is 63, and a score of 8-15 is classified as "mild anxiety", 16-25 as "moderate anxiety", and 26-63 as "severe anxiety". The items of the BAI, which consists of a total of 21 items and measures the participants' perceived anxiety state, are based on a 4-point Likert-type scoring system and scored as: (1) not affected at all, (2) affected mildly, (3) affected moderately, (4) affected severely.

2.4. Data Analysis

The data obtained in the study were analyzed using the Statistical Package for Social Sciences (SPSS) for Windows 22.0 program. Descriptive statistical methods (number, percentage, mean, standard deviation) were used while evaluating the data. The suitability of the data for normal distribution was evaluated with the Kolmogorov Smirnov test. In the analysis of data, when the assumption of normal distribution was met, t test and ANOVA were used in independent groups, and Mann Whitney U and Kruskal Wallis tests were used in data that did not show normal distribution. The statistical significance level was taken as 0.05 in all tests.

2.5. Ethical Aspect of Research

Ethics committee permission and consent from the participants were obtained to conduct this research. The Principles of the Declaration of Helsinki were complied with at all stages of the research. Ethics Committee Permission for this study was obtained from Batman University Scientific Ethics Committee (date: May 7, 2020; decision number: 2020/2).

3. RESULTS

59.1% of the participants in the study were women with an average age of 35.16 ± 13.4 . 52.8% of the individuals (1.602 people) were married and 42.2% had undergraduate degrees. The average BAI score distributions of the sociodemographic characteristics of individuals living in Turkey are given in Table 1.

Table 1. The BAI Score Distribution of People Living in Turkey According to Their Sociodemographic Features (n = 3035)

Demographic Variables		n (%)	BAI Score ($\bar{X} \pm SD$)	BAI Value
Gender	Male	1241 (%40.9)	1.58 ± 0.82	t = 2.777 p = .05
	Female	1794 (%59.1)	1.66 ± 0.68	
Age	18-31	177 (%5.8)	2.41 ± 0.45	F = 11.684 p = .01
	32-45	640 (%21.1)	2.47 ± 0.44	
	46-59	1529 (%50.4)	2.61 ± 0.42	
	60 and over	689 (%22.7)	2.51 ± 0.43	
Marital status	Single	1433 (%47.2)	1.50 ± 0.56	t = 2.175 p = .001
	Married	1602 (%52.8)	1.74 ± 0.85	
Educational status	Primary education	247 (%8.1)	2.37 ± 0.46	F = 14.856 p = .04
	Secondary education	535 (%17.6)	2.41 ± 0.43	
	Associate degree	380 (%12.5)	2.38 ± 0.35	
	Undergraduate	1281 (%42.2)	2.51 ± 0.45	
	Graduate	592 (%19.6)	2.49 ± 0.43	
Sosyo-economic status	Low	2359 (77.7)	1.76 ± 0.67	t = 2.674 p = .02
	Hight	676 (22.3)	1.54 ± 0.46	

BAI: Beck Anxiety Inventor, SD: Standard Deviation

It was found that the mean BAI scores were higher in women, in those in the advanced age group than in those in other age groups, in married individuals, in those with a higher education level, and in those perceiving their socioeconomic status lower than in those perceiving it as higher ($p < 0.05$) (Table 1). The distribution of the BAI mean scores by the health status of individuals is given in Table 2.

Table 2. The BAI Score Distribution of People Living in Turkey According to Their Health Status

Health Status		n (%)	BAI Score ($\bar{X} \pm SD$)	BAI Value
Their health status	Good	1836 (%60.5)	1.58 \pm 0.49	F = 12.236 p = .001
	Medium	910 (%30.0)	1.63 \pm 0.42	
	Bad	289 (%9.5)	1.85 \pm 0.35	
Easy access to health care status	Yes	780 (%25.7)	1.97 \pm 0.90	t = -15.629 p = .001
	No	2255 (%74.3)	1.51 \pm 0.63	
The status of performing regular diet	Yes	1569 (%51.7)	1.36 \pm 0.44	t = -21.923 p = .003
	No	1466 (%48.3)	1.91 \pm 0.88	
The status of performing regular exercise	Yes	716 (%23.6)	1.36 \pm 0.49	t = -11.126 p = .001
	No	2319 (%76.4)	1.71 \pm 0.79	
The status of having social hobby	Yes	1731 (%57.0)	1.47 \pm 0.57	t = -13.440 p = .005
	No	1304 (%43.0)	1.83 \pm 0.88	
The status of having a chronic disease	Yes	764 (%25.2)	2.16 \pm 1.00	t = 25.270 p = .003
	No	2271 (%74.8)	1.45 \pm 0.52	
Smoking	Yes, every day, at least once	263 (%8.7)	2.58 \pm 0.56	F = 2.983 p = .008
	Yes, sometimes	663 (%21.8)	2.57 \pm 0.46	
	I give up smoking	586 (%19.3)	2.48 \pm 0.29	
	Never smoked	1523 (%50.2)	2.41 \pm 0.98	
Sleeping problems	Yes	1038 (%34.2)	2.07 \pm 0.91	t = 26.068 p = .006
	No	1997 (%65.8)	1.40 \pm 0.50	

BAI: Beck Anxiety Inventor, SD: Standard Deviation

Individuals who perceive their health status as bad, access health services easily, think that they do not eat regularly, do not exercise regularly, do not have a hobby, have a chronic disease, smoke, and have sleeping problems, were found to have higher mean BAI scores ($p < 0.05$) (Table 2). The distribution of the BAI score averages by practices of individuals for protection from COVID-19 is given in Table 3.

Table 3. Distribution of BAI Mean Scores by Practices of Individuals for Protection from COVID-19

Practices of individuals for protection from COVID-19		n (%)	BAI Score ($\bar{X} \pm SD$)	BAI Value
Staying at home	Yes	2710 (%89.3)	1.53 \pm 0.63	t = -20.256 p = .01
	No	325 (%10.7)	2.30 \pm 1.02	
Not going out for the last 2 weeks	Yes	2403 (%79.2)	1.64 \pm 0.76	t = 2.325 p = .20
	No	632 (%20.8)	1.57 \pm 0.67	
Washing hands	Yes	2962 (%97.6)	1.63 \pm 0.74	t = 12.462 p = .02
	No	73 (%2.4)	1.72 \pm 0.67	
Wearing a mask	Yes	2824 (%93.0)	1.62 \pm 0.73	t = 13.842 p = .01
	No	211 (%7.0)	1.84 \pm 0.56	

BAI: Beck Anxiety Inventor, SD: Standard Deviation

It was found that the BAI score averages of individuals who did not stay at home during the outbreak period, did not wash their hands frequently, did not wear a mask, and did not comply with social distancing rules ($p < 0.05$) (Table 3). The distribution of the BAI mean scores of individuals by COVID-19 variables is given in Table 4.

Table 4. The Distribution of BAI Mean Scores by the Variables Experienced by Individuals During the Pandemic Period

COVID-19 Variables		n (%)	BAI Score ($\bar{X} \pm SD$)	BAI Value
Catching COVID-19	Yes	25 (%0.8)	2.55 \pm 0.64	t = 6.230 p = .01
	No	3010 (%99.2)	1.62 \pm 0.74	
Individuals in family and/or family circle catching COVID-19	Yes	651 (%21.4)	2.30 \pm 1.00	t = 29.370 p = .02
	No	2384 (%78.6)	1.44 \pm 0.52	
Having relatives dying of COVID-19	Yes	192 (%6.3)	2.62 \pm 0.97	t = 20.385 p = .01
	No	2843 (%93.7)	1.56 \pm 0.67	
Applying quarantine	Yes	299 (%9.9)	2.31 \pm 1.00	t = 17.506 p = .01
	No	2736 (%90.1)	1.55 \pm 0.67	
Using public transport	Yes	1036 (%34.1)	1.96 \pm 0.92	t = 18.791 p = .01
	No	1999 (%65.9)	1.45 \pm 0.55	
Traveling	Yes	1079 (%35.6)	2.03 \pm 0.94	t = 24.296 p = .02
	No	1956 (%64.4)	1.40 \pm 0.47	
Anxiety about job loss	Yes	739 (%24.3)	2.19 \pm 0.96	t = 24.948 p = .01
	No	2296 (%75.7)	1.46 \pm 0.56	
Having a relative at the age of 60 and above at home	Yes	689 (%22.7)	2.11 \pm 1.00	t = 24.277 p = .01
	No	2346 (%77.3)	1.44 \pm 0.50	

BAI: Beck Anxiety Inventor, SD: Standard Deviation

The BAI mean scores of the individuals who contracted COVID-19, had individuals in the family and/or family circle catching COVID-19, had relatives dying of COVID-19, applied quarantine, used public transport, traveled, had anxiety about losing their job, and had a relative at the age of 60 and above at home, were found to be higher ($p < 0.05$) (Table 4). The distribution of the average BAI scores of individuals living in Turkey is given in Table 5.

Table 5. The Average of BAI Scores of People Living in Turkey

	N	Min	Max	Mean	SD
BAI	3035	22	59	40.52	10.24

BAI: Beck Anxiety Inventor, Min: Minimum, Max: Maximum, SD: Standard Deviation

It was determined that the BAI mean scores of the individuals living in Turkey in the outbreak period were 40.52 ± 10.24 (Min: 22 Max: 59), and that these individuals experienced severe anxiety (Table 5).

4. DISCUSSION AND CONCLUSION

This study examines the individuals residing in seven regions of Turkey in terms of factors caused by the epidemic that affected their psychological status. Prior to the study, no study had been conducted on the psychological status of society during the COVID-19 outbreak in the country where

the study was conducted. The studies in Turkey mostly concentrate on the outbreak status and the behavior of groups and individuals by reducing them into smaller groups. As of July 19, 2020, when the data collection process of the study was terminated, the total number of COVID-19 cases in Turkey was 219.641, and the number of people who lost their lives was 5.491. As of November 19, 2020, when the process of writing the study was completed, the total number of COVID-19 cases in Turkey was 430.170 and the number of people who had lost their lives was 11.943 (Türkiye Cumhuriyeti Sağlık Bakanlığı, 2020a). COVID-19 infections, which affect the whole world, also cause psychological problems, increasing the indirect effects of the disease.

The results of the study show that women living in Turkey experience severe anxiety. Similar to our research findings, studies conducted during the COVID-19 outbreak process also show that women experience more anxiety than men (Solomou and Constantinidou, 2020; Islam et al., 2020; Moghanibashi-Mansourieh, 2020; Bäuerle et al., 2020; Ozamiz-Etxebarria et al., 2020; Ozdin and Bayrak Ozdin, 2020). However, some studies found that gender does not affect anxiety (Huang and Zhao, 2020; Rehman et al., 2020; Kuman Tuncel et al., 2020). The severe anxiety of women may be due to their responsibilities at home, work, as a mother, etc., and having a more emotional and delicate nature.

As did this study, the studies of Solomou and Constantinidou (2020) and Islam, Ferdous and Potenza (2020), found that individuals in the advanced age group experienced more anxiety during the COVID-19 outbreak. On the other hand, the 21-40 age group in the study of Moghanibashi-Mansourieh (2020), the 25-34 age group in the study of Bauerle et al. (2020), and the 26-30 age group in the study Ozamiz-Etxebarria et al. (2020) experienced anxiety. Kuman Tuncel et al. found that age does not affect anxiety. Their weaker immune systems, together with older people having more diseases that are chronic and a higher rate of mortality in COVID-19 infections, are thought to increase anxiety in the elderly.

In this study, the anxiety level of married people was found to be higher than singles during the outbreak period. Islam, Ferdous, and Potenza (2020) also found in their studies that married people experience more anxiety. Unlike this study, Solomou and Constantinidou (2020) found that as the level of education increases, anxiety decreases. This may be because married people presumably have more responsibilities than singles. As in the study of Solomou and Constantinidou (2020) and Moghanibashi-Mansourieh (2020), it was found in this study too that as the education level of individuals increase, their level of anxiety increases. Having a high level of education may cause an increase in the awareness and anxiety of individuals about coronavirus-related disease and death.

It was found in this study that individuals who perceive their health status as bad, easily access health services, think that they do not eat regularly, do not do regular exercises, do not have a hobby, have a chronic disease, smoke, and have sleeping problems, experience severe anxiety during the

outbreak period. Contrary to our research findings, Ozamiz-Etxebarria et al. (2020) found that those with chronic diseases had low anxiety. Kuman Tuncel et al. found that having another chronic disease does not affect anxiety. In a meta-analysis study conducted by Pappa et al. (2020) to examine the prevalence of anxiety, depression, and sleep disorders due to COVID-19; a sleep disorder prevalence was found in 38.9% of the participants. In the study conducted by Xiou, Zhang, Kong, Li, and Yang (2020), it was reported that the sleep quality of individuals was low. Lai et al. (2020) detected sleep disorders in 34% of the participants. It can be said that the health conditions of individuals are directly related to the coronavirus and this situation increases anxiety.

It was found in this study that individuals who do not stay at home during the outbreak period, do not wash their hands frequently, do not wear masks, and do not comply with social distancing rules experience more anxiety. According to the study of Jungman and Witthöft (2020), 2.6% of the participants purchased a mask during the COVID-19 outbreak period, 2.8% wore a mask, 94.7% washed their hands more frequently, and 91.9% avoided. Health behaviors for protection from coronavirus can reduce anxiety.

The BAI mean scores of the individuals who contracted COVID-19, had individuals in the family and/or family circle catching COVID-19, had relatives dying of COVID-19, applied quarantine, used public transport, traveled, had anxiety about losing their jobs, and who had a relative at the age of 60 and above at home, were found to be higher ($p < 0.05$) (Table 4). According to the results of the study of Jungman and Witthöft (2020), 80.1% of the participants stated that they avoided traveling within the country where the study was conducted and 89.5% outside the country. The results of the study of Bostan et al (2020) showed that 17.7% of the participants obeyed general and hand hygiene rules to protect against COVID-19, 25.7% applied social distancing, and 18.2% stayed at home. In a study conducted with 144 inpatients diagnosed with COVID-19, it was reported that 34.72% of the patients had anxiety symptoms. In the same study, it was stated that there was a significant relationship between having a high rate of anxiety symptoms and having less social support in inpatients diagnosed with COVID-19 (Kong et al., 2020). The suspicion of or the condition of contracting COVID-19 themselves, or the people around them, may increase anxiety.

The individuals living in Turkey covered in the study were found to have a severe level of anxiety during the outbreak. In the study conducted by Ekiz, İlman, and Donmez (2020), a moderate level of anxiety was found due to the COVID-19 outbreak. It was reported in the research conducted by Huang and Zhao (2020) that the mental problems of the Chinese people increased during COVID-19. It was found that especially young people spend a lot of time thinking about the epidemic. During the COVID-19 outbreak in Wuhan, the prevalence of anxiety in the general population over the age of 18 was determined as 2.6% (Gao et al., 2020). Lai et al. (2020) detected anxiety in 44.6% of the participants. Tan et al. (2020) found depression symptoms in 8.1%, anxiety symptoms in 10.8%, and stress symptoms in 6.4% of the participants. Pappa et al. (2020), in a meta-analysis study to examine

the prevalence of anxiety, observed a prevalence of anxiety in 23.2% of the participants. It can be said that the uncertainty and severity of the COVID-19 outbreak can increase the stress levels of individuals.

In conclusion, the study has found that individuals living in Turkey experience high levels of anxiety due to the COVID-19 outbreak. It was found that the mean BAI scores were higher in women, in those in the advanced age group than in those in other age groups, in married individuals, in those with a higher education level, and in those perceiving their socioeconomic status lower than in those perceiving it as higher. The psychological resilience of women, married people, the elderly, and those with high educational and socioeconomic levels who experience more stress during the outbreak process should be increased. Individuals should avoid information pollution, visit the websites of the Republic of Turkey Ministry of Health, Turkish Thoracic Society, KIZILAY, TTB, HASUDER, KLİMİK and KLİMUD (names in Turkey) which are trusted sources of information, and receive professional support from experts.

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