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Correlation Between Health Perception and Psychological Resilience in Pandemic Outbreaks: The COVID-19 Case Analytical Research

Pandemi Nitelikli Salgınlarda Sağlık Algısı ve Psikolojik Sağlamlık İlişkisi: COVID-19 Örneğinde Analitik Araştırma

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This study was presented as an oral presentation at Online International Conference of COVID-19 (CONCOVID), 16-18 March 2018, Online.

ABSTRACT Objective: This study was aimed to examine the correlation between health perception and psychological resilience in terms of some variables in the case of the coronavirus disease-2019 pandemic. **Material and Methods:** The research is cross-sectional. The data of the research were collected through digital software. Ethical permission was obtained before the study, and the study was carried out in accordance with the Helsinki Principles. The data of the research were collected between 12-April and 30 April 2020. In data collection, Individual Information Form, the Brief Resilience Scale (BRS) and the Perception of Health Scale (PHS) were used. **Results:** The participants had a mean age of 33.24±10.95 years, with 35.7% males. Mean scores were 52.68±6.80 for PHS and 20.11±4.24 for BRS. It has been observed that the variables of perceiving one's level of income as sufficient and perceiving one's health as perfect created differences in terms of both psychological resilience and perception of health scores. In the study, it was found that the perceptions of health of the participants increased in parallel with their psychological resilience ($p<0.05$). **Conclusion:** The participants were found to have moderate levels of health perception and psychological resilience. Their measures against the epidemic and certain socio-demographic characteristics led to differences in their psychological resilience and health perceptions. Knowing the psychological resilience and health perceptions of individuals can improve the quality of treatment and care.

Keywords: COVID-19; pandemic; psychological resilience; health perception

ÖZET Amaç: Bu araştırmanın amacı; bazı değişkenler açısından sağlık algısı ve psikolojik sağlamlık arasındaki ilişkinin koronavirüs hastalığı-2019 pandemisi örneğinde araştırmaktır. **Gereç ve Yöntemler:** Araştırma kesitsel özelliktedir. Araştırmanın verileri dijital yazılım üzerinden toplanmıştır. Araştırma öncesinde etik izin alınmış, Helsinki Prensipleri'ne uygun çalışılmıştır. Veriler, 12-20 Nisan 2020 tarihleri arasında toplanmıştır. Verilerin toplanmasında Bireysel Bilgi Formu, Kısa Psikolojik Sağlamlık Ölçeği (KPSÖ) ve Sağlık Algısı Ölçeği (SAÖ) kullanılmıştır. **Bulgular:** Katılımcıların yaş ortalaması 33,24±10,95'tir ve %35,7'si erkektir. Puan ortalamaları SAÖ'de 52,68±6,80, KPSÖ'de 20,11±4,24'tür. Gelir düzeyini yeterli olarak algılama ve sağlığını mükemmel olarak algılama değişkenlerinin hem psikolojik sağlamlık hem de sağlık algısı puanı açısından fark oluşturduğu görülmüştür. Araştırmada, katılımcıların sağlık algıları arttıkça psikolojik sağlamlıklarının da arttığı bulunmuştur ($p<0,05$). **Sonuç:** Katılımcıların sağlık algıları ve psikolojik sağlamlıkları orta düzeydedir. Salgından korunmaya yönelik aldıkları önlemler ve bazı sosyodemografik özellikleri, psikolojik sağlamlıkları ve sağlık algıları üzerinde fark oluşturmaktadır. Bireylerin stresli yaşam olaylarıyla mücadele edebilmeleri için psikolojik sağlamlıkları ve sağlık algıları geliştirilmeli ve desteklenmelidir.

Anahtar Kelimeler: COVID-19; pandemi; psikolojik sağlamlık; sağlık algısı

Coronavirus disease-2019 (COVID-19) (severe acute respiratory syndrome-coronavirus-2 infection), which started with the first suspicious cases in China (Hubei-Wuhan) in mid-November 2019, has been actively affected most countries in the world for more than 1.5 year so far, the infection continues to adversely influence the world in numerous aspects from economic to psychological.[1]

In the face of this threatening epidemic, the health behaviors of people gain great importance in

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terms of both minimizing the prevalence and spread of the epidemic and reducing possible life losses.[2] Health behaviors may differ based on a wide variety of factors, including health perception and socio-demographic characteristics.[3] Health perception can be defined as the overall picture of a person's feelings, expectations, concerns and prejudices regarding their own health.[4] Individual differences in subjective health perception also have a crucial role in psychological well-being later in life, as individual attitudes, motivations and beliefs affect perceptions regarding disease and disability.[5]

The COVID-19 outbreak is a unique process in that it is uncertain when it will end, has widespread and serious effects on daily life, and creates a complex source of stress. In this stressful and traumatic period, some people are trying to recover from COVID-19 or cope with the fear of illness and death. Many people are forced to adapt to the new situation dominated by the fear of viral spread and transmission. In the face of COVID-19, the person needs to cope with ongoing stress factors and keep psychological distress to a minimum.[6] Each individual's reactions to negative situations, stressful life events, or strategies to deal with these situations are different.[7] Psychological resilience is the ability to successfully adapt to adversity, trauma or major stressors and refers to a dynamic process.[8] Psychological resilience is not a fixed feature, the psychological resilience of the individual may decrease over time or increase. For this reason, psychological resilience is a form of behavior that can be developed and learned.[9] It is stated that individuals with high psychological resilience experience positive emotions more, show less symptoms of depression, have higher resistance to stress, manage stress better, get old in a healthy way and cope better with traumatic events.[10] Individuals with low psychological resilience are more vulnerable and need more psychological help to protect their psychological health against the CoV epidemic. In this respect, determining the psychological resilience of individuals during the pandemic will guide in determining the measures to be taken for community mental health and determining the psychological interventions that can be applied to increase mental health and psychological resilience during and after the coronavirus epidemic.[11] The aim of this study is to investigate the relationship between health perception and psychological resilience in terms of some variables in pandemic outbreaks in the COVID-19 sample.

MATERIAL AND METHODS

TYPE OF STUDY

The research is cross-sectional.

POPULATION AND SAMPLE OF THE STUDY

The first case of the COVID-19 epidemic in Türkiye was identified on March 11th, 2020, and implementations for social isolation were started as of this date. Therefore, the data for the study were collected from individuals aged 20 and over in a digital environment. The data of the research were collected between 12 April and 30 April 2020. The data were collected on the coastline of the Black Sea. The city that was designated as the target population of the study, which led us to examine the health behaviors of the people residing there, as they are included in the scope of high risk. Participation was ensured through digital software, and the participants were selected using the snowball sampling method. In this context, since the whole target population is not known, the data were collected by improbable sampling and easy sampling methods for both speed and ease. Six hundred and seveteen people participated in the research. The size of the sample group in the study was made with the "post hoc" power analysis. Effect size 0.20, α err probe: 0.05 is taken. When a one-way calculation was made over two groups as men and women, it was seen that the power value was 0.76 (over 0.70 is considered sufficient) in this study. The participants were informed through an information text placed at the top of the study form in accordance with the criteria of the Declaration of Helsinki.

ETHICAL APPROVAL

The participants were informed through an information text placed at the top of the study form in accordance with the criteria of the Declaration of Helsinki. Ethics committee approval was obtained from Giresun University Scientific Research and Publication Ethics Committee for the study (date: 06.05.2020, number: 44079388-044-E.23388).

DATA COLLECTION TOOLS

Personal Information Form

This form determines certain characteristics of the participants (age, gender, educational status, employment, perception of income, family structure, habits, chronic disease, persons in the risk group in the household -diagnosed/suspected persons-behaviors regarding personal protective measures for the epidemic- perception of information about the epidemic, etc.).

Brief Resilience Scale

Brief Resilience Scale (BRS) is a self-report form to measure individuals' psychological resilience levels, the original form of the scale was created by Smith et al. in 2008 and adapted to Turkish by Doğan in 2015.[12,13] It is a 5-point Likert type scale consisting of 6 questions. It is single-factored. High scores indicate a high level of psychological resilience. The internal consistency coefficient of the scale was found to be 0.83 in the study of Doğan and 0.78 in this study.

Perception of Health Scale

Perception of Health Scale (PHS) was developed by Diamond et al. in 2007 and adapted to Turkish by Kadıoğlu and Yıldız in 2012.[14,15] The PHS is a 5-point Likert type scale consisting of 15 items and 4 factors. The factors are center of control (CC), certainty (C), importance of health (IH) and self-awareness (SA). The scale has a minimum score of 0.75 and a maximum score of 15. Kadıoğlu and Yıldız found the scale to have an internal consistency coefficient of 0.77 for PHS, 0.90 for CC, 0.91 for SA, 0.91 for C and 0.82 for IH. In the current study, we found the scale to have an internal consistency coefficient of 0.67 for PHS, 0.71 for CC, 0.65 for SA, 0.91 for C and 0.61 for IH.

Cronbach's alpha coefficient was used to test the reliability of the data in the research. In our study, it was found that both BRS and PHS were "medium reliable".

Evaluation of Data

The data obtained from the research were evaluated using the statistical package program and error checks, tables and statistical analyzes were done. Number and percentage values are presented in statistical evaluations. Before analyzes for normality, lost data and extreme value analyzes were performed. Then, we made histogram drawings for conformity to normal distribution, checked the skewness and kurtosis values and conducted Kolmogorov-Smirnov analyzes. Since the data were not normally distributed, logarithmic transformations were used. However, the total scale scores and the factor scores did not show a normal distribution even after this procedure. Therefore, we used non-parametric tests (Mann-Whitney U and Kruskal-Wallis) and included mean rank values instead of mean and standard deviations in the tables. The correlations between descriptive variables and scale scores were evaluated using a bivariate correlation analysis, and $p<0.05$ was accepted as the statistical significance level.

RESULTS

We found that the participants had a mean age of 33.24±10.95 (median: 32, minimum: 20, maximum: 68). 35.7% were male, and 84.1% had higher education. The participant characteristics are given in Table 1.

The mean scores from the scales and the factors were as follows: 20.11±4.24 for BRS (median: 20, minimum: 7, maximum: 30), 52.68±6.80 for PHS (median: 52, minimum: 36, maximum: 75), 17.70±3.61 for CC (median: 18, minimum: 5, maximum: 25), 13.48±3.37 for C (median: 14, minimum: 4, maximum: 20), 10.90±2.33 for IH (median: 11, minimum: 1, maximum: 15) and 10.59±2.34 for SA (median: 11, minimum: 3, maximum: 15).

The preventive health measures taken by the participants during the pandemic process are shown in Table 2.

Table 3 shows the distribution of BRS and PHS scores on some characteristics and whether they made a difference. We found differences between BRS scores in terms of the variables of gender, marital status, perception of income, chronic disease, health perception, the presence of persons in risk groups in the household ($p<0.05$). We found differences between PHS scores in terms of the variables of perception of income, current accommodation, habits, health perception ($p<0.05$).

TABLE 1: Some characteristics of the participants (n=617).

Variable	Number	%
Age group		
35 years and under	376	60.9
36 years and over	241	39.1
Gender		
Female	397	64.3
Male	220	35.7
Education level		
Literate	1	0.2
Primary school	14	2.3
Secondary school	83	13.4
Undergraduate degree	519	84.1
Marital status		
Married	314	50.9
Single/widow	303	49.1
Perception of income		
Enough	371	60.1
Insufficient	156	25.3
Does not want to say	90	14.6
Longest living area		
Metropolitan city/provincial center	425	68.9
District	153	24.8
Village	39	6.3
Other members of the household		
Living alone	37	6.0
Family members	545	88.3
Relatives	24	3.9
Friends	11	1.8
Habits		
Only smoking	121	19.6
Only alcohol use	10	1.6
Both smoking and alcohol use	29	4.7
No harmful habits	412	66.8
Used to have a harmful habit	45	7.4
Chronic disease		
Yes	64	10.4
No	553	89.6
Are there any individuals in risk groups in their household?		
Yes	282	45.7
No	335	54.3
What risk group is the person in? (n=282)		
65 years and over	78	27.9
Child	53	18.7
Suppressed immune system	16	5.7
Pregnant	11	3.9
Chronic disease	118	41.7
Health worker	6	2.1
Is anyone in the household diagnosed with COVID-19?		
Yes	2	0.3
No	611	99.0
Suspected persons	4	0.6
Overall perception of health		
Very good	50	8.1
Good	164	26.6
Moderate	325	52.7
Poor	74	12.0
Very poor	4	0.6
Thinking that the epidemic is exaggerated by the media and health professionals		
Yes	80	13.0
No	410	66.5
Sometimes	114	18.5
Not required	13	2.1

continued...→

Table 4 shows the distribution of the sub-dimension scores of the scale in terms of some sociodemographic characteristics. We determined that education level created a difference in both CC and SA and that those with higher education levels had higher scores in these factors ($p<0.05$).

Table 5 shows the correlation between the ages and BRS and PHS scores of the participants. It was seen that the psychological resilience of the participants increased in parallel with their health perceptions ($p<0.05$). In addition, there was a positive correlation between age and psychological resilience ($p<0.05$), but this correlation was not seen in perception of health ($p>0.05$).

DISCUSSION

Individual health perception is one of the most important factors affecting health protective behaviors.[16] Evaluation of health perceptions and health behaviors includes not only the biological dimension of health, but also the perceived well-being in physical, mental, social and functional aspects.[17] Given the importance of human psychological and behavioral factors in managing pandemics, it is very important to evaluate psychological and behavioral responses to the situation.[18]

TABLE 2: Personal protective behaviors of participants during the pandemic process (n=617).

Variable	Yes n (%)	No n (%)	Sometimes n (%)
Using both masks when going outside	433 (70.2)	62 (10.0)	122 (19.8)
Avoiding contact with other people (kissing, shaking hands, hugging, etc.)	598 (96.9)	9 (1.5)	10 (1.6)
Taking care not to admit to health institutions unless for an emergency	595 (96.4)	13 (2.1)	9 (1.5)
Paying attention to social distancing	577 (93.5)	6 (1.0)	34 (5.5)
Paying attention to washing their hands frequently	593 (96.0)	7 (1.2)	17 (2.8)
Paying attention not to touch their face and eyes	476 (77.1)	30 (4.9)	111 (18.0)
Thinking that the epidemic is exaggerated by the media and health professionals	80 (13.0)	410 (66.4)	137 (20.6)

TABLE 3: Distribution of psychological resilience and health perception scores according to some characteristics (n=617).

Characteristic	BRS mean rank	Test value	PHS mean rank	Test value
Gender				
Female	293.76	U=37620.50	315.29	MWU=41172.50
Male	336.50	**p=0.004**	297.65	p=0.238
Marital status				
Married	336.83	U=38831.50	308.47	MWU=47406.00
Single/widow	280.16	**p=0.001**	309.54	p=0.704
Perception of income				
Enough	334.82[a,b]	KW=19.97	328.90[a]	KW=12.96
Insufficient	265.56[a]	**p=0.001**	269.01[a]	**p=0.002**
Does not want to say	277.84[b]		296.29	
Longest living area				
Provincial center	307.99	KW=0.50	305.04	KW=6.98
District	315.64	p=0.77	333.08[a]	**p=0.04**
Village	293.95		257.72[a]	
Habits				
Only smoking	322.11		295.79	
Only alcohol use	335.25		306.55	KW=13.32
Both smoking and alcohol use	306.78	KW=2.461	248.40[a]	**p=0.010**
No harmful habits	308.29	p=0.652	324.42[a]	
Used to have a harmful habit	275.83		242.89	
Chronic disease				
Yes	253.80	U=14163.00	280.63	MWU=15880.00
No	315.39	**p=0.009**	312.28	p=0.177
Perception of health				
Very good	372.94[a,b,c]		406.65[a,b,c]	
Good	364.35[d,e]		366.77[d,e]	
Moderate	289.51[a,d,f]	KW=40.953	283.42[a,d,f]	KW=54.104
Poor	235.19[b,e,f]	**p=0.001**	234.18[b,e,f]	**p=0.001**
Very poor	189.88[c]		182.13[c]	
Are there any individuals in risk groups in their household?				
Yes	281.85	U=39580.00	299.15	MWU=44457.50
No	331.85	**p=0.001**	317.29	p=0.207

[a,b,c,d,e,f]show the groups that are the sources of difference; BRS: Brief Resilience Scale; PHS: Perception of Health Scale; KW: Kruskal-Wallis.

TABLE 4: Distribution of PHS sub-dimension scores in terms of some socio-demographic characteristics (n=617).

Variable	CC mean rank	Test value	C mean rank	Test value	IH mean rank	Test value	SA mean rank	Test value
Age group								
35 years and under	306.83	U=44493.00	295.41	U=40199.50	314.63	U=43191.00	324.21	MWU=39588.00
36 years and over	312.38	p=0.705	330.20	**p=0.018**	300.22	p=0.322	285.27	**p=0.007**
Marital status								
Married	311.67	U=46732.50	324.88	U=42584.50	300.29	U=44837.50	297.56	MWU=43980.00
Single/widow	306.23	p=0.704	292.54	**p=0.024**	318.85	p=0.212	320.85	p=0.101
Chronic disease								
Yes	280.63	U=15880.00	308.71	U=17677.00	302.75	U=17296.00	258.47	MWU=14462.00
No	312.28	p=0.177	309.03	p=0.989	309.72	p=0.764	314.85	**p=0.015**
Perception of income								
Enough	311.99	KW=0.941	327.74[a]	KW=16.534	320.75	KW=4.834	319.84	KW=4.922
Insufficient	297.41	p=0.625	259.40[a,b]	**p=0.001**	284.15	p=0.089	302.76	p=0.085
Does not want to say	316.77		317.71[b]		303.62		275.13	
Perception of health								
Very good	361.31	KW=20.350	399.76	KW=26.601	386.11	KW=20.802	363.60	KW=27.120
Good	349.54	**p=0.001**	340.32	**p=0.001**	337.05	**p=0.001**	352.43	**p=0.001**
Moderate	289.08[a]		286.95[a]		291.96[a]		293.36a	
Poor	275.36		272.55[b]		274.97		250.89a,b	
Very poor	233.75[a]		356.38[a,b]		209.13[a]		191.88b	
Education level								
Literate	132.00	KW=9.583	530.50	KW=6.711	414.00	KW=2.051	50.00	KW=10.583
Primary school	201.18	**p=0.022**	206.07	p=0.082	320.79[a]	p=0.562	218.68	**p=0.014**
Secondary school	344.57		321.98		285.62[b]		272.90	
Undergraduate degree	306.56		309.27		317.71[a,b]		317.71	

[a,b] show the groups that are the sources of difference; PHS: Perception of Health Scale; CC: Center of control; C: Certainty; IH: Importance of health; SA: Self-awareness; KW: Kruskal-Wallis

TABLE 5: Correlation between BRS and PHS scores and age (n=617).

		BRS	PHS	Age
BRS	Rho*	1		
	p value			
PHS	Rho*	0.330**	1	
	p value	**0.001**		
Age	Rho*	0.131**	0.012	1
	p value	**0.001**	0.775	

*Spearman correlation analysis; *0.05 significance; **0.01 significance; BRS: Brief Resilience Scale; PHS: Perception of Health Scale.

The participants in our study were found to have highly compliant behaviors in terms of the protective measures against the COVID-19 infection. People can contribute to their own health and well-being by adopting certain health behaviors or by avoiding certain behaviors.[19] A higher perception regarding the effectiveness of the measures taken and a higher perception of threat regarding the disease both lead to higher positive behavioral change. If individuals believe that a certain disease can easily spread and that high-risk behaviors will deteriorate their health and they live according to this belief, they develop preventive behaviors and avoid actions that they perceive as a danger to their health. Also, more information on the pandemic increases the probability of taking preventive measures.[20,21]

In this study, the participants were found to have an above average mean health perception score. In terms of health perception factors, the highest mean score was found to be in CC factor. Özdelikara et al. conducted a study on the health perception of university students and found similar results.[20] Perception of health is a concept that is based on self-assessment and that reflects the multidimensionality of health.[21] CC determines whether individuals attribute their health to factors other than themselves (luck, fate, religious beliefs, etc.) and their self-confidence in terms of changing their health. We can safely say that the participants in our study assumed their responsibilities regarding their health.

PHS scores were found to be higher among individuals living in the district center, those who did not have harmful health habits, those who perceived their health as perfect. Another study also found that those living in the district had higher health perception scores, although the same study marked lower scores in individuals who perceived their health as "very good".[22]

In this study, we found those in the older age group, those who perceived their income as inadequate to have higher C scores. C determines whether individuals have a clear idea of what to do to stay healthy and to improve their health.[17] The fact that the media constantly mentions the protective measures and how the pandemic affects older individuals more severely may have contributed to the positive behaviors of our participants in this age group in terms of maintaining their health. Beside affecting individuals biologically, socially and psychologically, the pandemic also leads to negative economic outcomes. Those who perceived their income as inadequate, avoid risky behaviors regarding their health and act more carefully in taking measures, which may be because they believe their financial status will be further damaged if they get ill.

Those with higher education level were found to have higher mean scores in both CC and SA factors. Bademli and Lök found that those with higher education levels had higher CC and SA scores, similar to our study. It is stated that education level is an important determinant of overall perception of health and that higher education levels may therefore create more intellectual perceptions regarding health. However, unlike our resuts, it was stated that mean C scores were higher in those with a good economic status.[23]

In this study, we found the participants to have a moderate level of psychological resilience. In another study conducted during the COVID-19 pandemic, it was found that, different from our finding, the psychological resilience of the participants was low.[24] Differences in study results may be due to cultural differences.

Those who perceived their health as perfect, those who had no chronic disease, those who perceived their income as adequate, males, married individuals, those who had no one in a risk group in their household had higher mean scores. The increase

in people's perception of the possibility of catching COVID-19 also increases their concerns. In this study, the absence of a risky individual in the family may cause people to experience less anxiety in terms of contamination. Psychological resilience has an important effect on facilitating this process in coping with negative emotions during the COVID-19 epidemic, and there is a negative relationship between fear and anxiety of getting sick and psychological resilience.[25,26]

In the literature, it has been reported that there is a relationship between psychological resilience and psychological health, and worse perception of health has been reported in those with low psychological resilience.[27] In patients who face various stressors during chronic diseases have their psychological resilience significantly affected. In the study of Ejder, hemophilia patients had lower psychological resilience compared to healthy individuals.[28] Some of the social determinants affecting psychological resilience and health include socio-economic status, psychosocial and emotional factors, environment, education, culture and gender.[10] The effect of gender on psychological resilience may be attributed to the gender roles of women and men in assuming different responsibilities and thus experiencing different stressful events in various aspects.[29] In the study of Tosun et al., men were found to have higher psychological resilience.[30] Considering that psychological resilience comes to the fore when stressful life events are encountered, social support may affect psychological resilience.[29] Lök and Bademli showed that there is a positive relationship between perceived social support and psychological resilience. They also found that married individuals were psychologically more resilient.[31] The higher psychological resilience of married people may be due to their higher social support.

In this study, we determined a positive and significant correlation between age and psychological resilience. In a study conducted with healthcare professionals, it was shown that age, having children, profession and gender variables significantly predicted psychological resilience. Older age and being a man increased resilience, and having more children lowered psychological resilience. Moreover, higher levels of negative emotional state lower the level of psychological resilience.[32] Psychological resilience can be acquired later on in life. Individuals can carry this ability in proportion to time and their experiences. Individuals who have psychological challenges and difficult times in their childhood gain this resilience thanks to their struggle to survive, becoming stronger and gaining psychological resilience with advancing age.[33]

In this study, we observed that psychological resilience increased in parallel with better perceived health. COVID-19 can be described as a first pandemic with serious psychological, social and economic consequences. Pandemics that reach life-threatening levels increase anxiety levels and avoidance behaviors and bring social life to a halt.[2] The recent CoV (COVID-19) pandemic is not different, in that it threatens not only physical health, but also psychological health. Defined as the process of adaptation when significant sources of stress such as trauma, threat and serious health problems are encountered, psychological resilience is key in combating a challenging situation that threatens both physical and psychological health. This finding demonstrates individuals ability to take care of their own health responsibilities, both in complying with the protection measures and in overcoming the situation psychologically.

LIMITATION

The study has the limitations of being only quantitative, being conducted with a limited number of participants, and collecting data on the internet.

CONCLUSION

This research was determined that most participants applied protective measures to combat the epidemic and had moderate levels of perception of health and psychological resilience. Among the PHS factors, the highest mean score was in CC, while the lowest mean score was in SA. We determined a positive and significant correlation between age and psychological resilience and observed that psychological resilience increased in parallel with the perceptions of health of individuals.

In line with these findings, we can suggest the following:

■ Continuing education through the social media during the epidemic in order to increase the perceptions of health of individuals,

■ Providing more information and awareness to people to ensure that they implement the protection measures,

■ Ensuring that people participate in sports activities and social interactions within the limitations of the pandemic in order to increase their level of psychological resilience,

■ Providing professional counseling to increase the psychological resilience of individuals, since psychological health is a mandatory addition to physical health to achieve a complete well-being.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

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

Authorship Contributions

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