

COVID-19 Pandemi Sürecinde Türk Toplumunun Sağlık Çalışanlarına Yönelik Damgalayıcı Tutumlarının COVID-19 Korkusu İle İlişkisi

The Relationship Between the Stigmatizing Attitude of Turkish Society Towards Healthcare Professionals During the COVID-19 Outbreak and Fear of COVID-19

Seval CÜCELER¹, Behire SANÇAR¹

Özet: Bu tanımlayıcı ve kesitsel araştırma, COVID-19 pandemisi sürecinde Türk toplumunun sağlık çalışanlarına yönelik damgalayıcı tutumları ile COVID-19 korkusu arasındaki ilişkiyi incelemek amacıyla 556 kişi ile gerçekleştirilmiştir. Veriler, kişisel bilgi formu, Covid-19 Pandemi Sürecinde Sağlık Çalışanlarını Damgalayıcı Tutum Anketi ve Koronavirüs Korkusu (COVID-19) Ölçeği kullanılarak çevrimiçi olarak toplanmıştır. COVID-19 Korkusu Ölçeği ile damgalayıcı tutum anketi arasındaki ilişki Pearson korelasyon katsayısı kullanılarak incelenmiştir. İlköğretim düzeyindeki katılımcıların damgalayıcı tutum anketi puanları diğer eğitim düzeyindeki katılımcılara göre daha yüksekti ve aradaki fark istatistiksel olarak anlamlıydı ($p<0,05$). Ayrıca ilköğretim düzeyinde eğitime sahip katılımcıların COVID-19 Korkusu Ölçeği puanları lise ve lisansüstü eğitim düzeyine sahip katılımcılara göre daha yüksek bulundu ve aradaki fark istatistiksel olarak anlamlıydı ($p<0,05$). Yakınına COVID-19 nedeniyle kaybeden katılımcıların damgalayıcı tutum anketi puanları ve COVID-19 Korkusu Ölçeği puanları, yakınına kaybetmeyen katılımcılara göre daha yüksekti ve aradaki fark anlamlıydı ($p<0,05$). Yapılan korelasyon analizi sonucunda, Covid-19 korkusu ölçek puanları ile damgalayıcı tutum anketi puanları arasında istatistiksel olarak anlamlı pozitif ve orta düzey bir ilişki olduğu görüldü. ($r: 0.377$; $p<001$). Topluma en yakın sağlık profesyoneli olarak hemşirelerin, COVID-19 hakkında toplumu doğru bilgilendirmesi ve damgalama karşıtı faaliyetler yürütmesi, bizim çalışmamız doğrultusunda daha geniş katımlı çalışmaların yapılması önerilmektedir.

Anahtar Kelimeler: COVID-19 korkusu, damgalama, sağlık profesyonelleri.

Abstract: This descriptive and cross-sectional research was carried out with 556 individuals in order to examine the relationship between the stigmatizing attitudes of Turkish society towards healthcare workers and fear of COVID-19 during the COVID-19 outbreak. Data were collected online using a demographic characteristics form, the Attitudes Stigmatizing Healthcare Workers During the COVID-19 Outbreak questionnaire, and the Fear of Coronavirus (COVID-19) Scale. The relationship between the Fear of COVID-19 Scale and the stigmatizing attitude questionnaire was examined using Pearson's correlation coefficient. The stigmatizing attitude questionnaire scores of the participants at the primary education level were higher than the participants at the other education level, and the difference was statistically significant ($p<0.05$). In addition, Fear of COVID-19 Scale scores of the participants with primary level education were higher than those of the participants with high school and graduate education levels, and the difference was statistically significant ($p<0.05$). The stigmatizing attitude questionnaire scores and the Fear of COVID-19 Scale scores of the participants whose relatives had died due to COVID-19 were higher than those of the participants who had not lost relatives, and the difference was significant ($p<0.05$). The correlation analysis showed a statistically significant positive and moderate level correlation between the Fear of COVID-19 Scale scores and the stigmatizing attitude questionnaire scores ($r: 0.377$; $p<001$). It is recommended that nurses, the healthcare professionals in closest contact with the public, supply correct information about COVID-19 and engage in anti-stigmatization activities, and that research with wider participation be carried out in line with this study.

Keywords: Fear of COVID-19, stigma, healthcare professionals.

¹ Toros Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Bölümü, Mersin/Türkiye

INTRODUCTION

Epidemics throughout history have led to the stigmatization of individuals, managers, and especially healthcare workers who have the disease and are likely to get it (Erkin, 2021). The fear of the unknown and the unfamiliar has created a justification for the exclusion and disenfranchisement of individuals with a seemingly incurable medical illness (L. Williams et al., 2011). The COVID-19 outbreak, which has affected the whole world, has also brought many difficulties. One of the challenges is stigma (Yılmaz et al., 2021). The concept of stigma is generally expressed as unjust treatment of a person or group because of a different characteristic they have (Ertem, 2020). During the COVID-19 outbreak, individuals diagnosed with COVID-19 and their family members, individuals receiving treatment, and even individuals recovering have been stigmatized by society. However, the stigmatization of healthcare workers during this period has been the most destructive kind of social stigma (Bhattacharya et al., 2020). In some countries, healthcare workers were evicted from rental homes, suffered verbal and physical violence, and were not allowed to use public transport (Bagcchi, 2020). Nurses participating in a qualitative study reported that society considered nurses caring for COVID patients infected with the virus and labeled them "COVID nurses". One of the participants conveyed the feelings she/he felt as a result of stigma, stating that "It's so annoying when people call me "COVID"; I felt like a virus in my own society" (Pasay-an et al., 2022). Furthermore, the COVID-19 outbreak has caused intense fear in society (Lin, 2020). COVID-19 is considered a new and unknown disease and fear of the unknown is the basis of the stigma associated with it (Social Stigma Associated with COVID-19, n.d.). Healthcare workers were even seen as a source of COVID-19 infection by some people, and the fear of COVID-19 among the public made healthcare workers the target of stigmatization (Bagcchi, 2020). The fear and stigma involving the COVID-

19 outbreak may have negative consequences on disease control (Ornell et al., 2020). Stigmatized healthcare workers may experience a sense of burnout, their already heavy burden may increase further, and their social support systems may decrease during this process. This can result in an increase in stress levels and psychological (Atac & Kaplan, 2021; Yılmaz et al., 2021). Considering all these, it becomes important to combat the stigma against healthcare professionals and to increase research on this issue during the outbreak. When the literature is reviewed, it is noteworthy that the relationship between the stigmatizing attitudes of society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak has not been adequately investigated. In this context, this research was carried out to examine the relationship between the stigmatizing attitudes of society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak.

Research Hypotheses;

H0: There is no relationship between the stigmatizing attitudes of the society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak.

H1: There is relationship between the stigmatizing attitudes of the society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak.

METHOD

Participants

The participants in this descriptive and cross-sectional study were individuals in Turkey over the age of 18. The research data were collected online with a questionnaire created using the Google Forms application. Participants volunteering to fill out the data collection form were asked to convey the form to those around them and 556 individuals formed the sample group of the study by means of snowball sampling. The power of the study was calculated using the program G*Power 3.1.9.2. As a result of the analysis applied to 556 people with $\alpha=0.05$, effect size was 0.377 and the power of the study, which was calculated post hoc, was 1.00.

The minimum required power value for post hoc analysis is 0.67. Thus, the power was acceptable and the sample size was sufficient.

Measures

A demographic characteristics form, the Attitudes Stigmatizing Healthcare Workers During the COVID-19 Outbreak questionnaire, and the Fear of COVID-19 Scale were used. In the demographic characteristics form prepared by the researchers in light of the literature (Bagcchi, 2020; Bhattacharya et al., 2020; Pasay-an et al., 2022; Taylor et al., 2020). 11 questions were asked to obtain introductory information about the participants (age, sex, occupation, marital status, number of children, education level, having had COVID-19, having received a COVID-19 vaccine).

Stigmatizing Attitudes to Healthcare Professionals During the COVID 19 Outbreak:

The questionnaire was created by the researchers based on the relevant literature (Bagcchi, 2020; Bhattacharya et al., 2020; Pasay-an et al., 2022; Taylor et al., 2020). There are 8 questions in the survey to measure the attitude of society towards healthcare workers during the COVID-19 outbreak. The questionnaire was sent to 13 instructors who are experts in their fields, and their expert opinions were obtained and the coverage validity rate (CVR) was checked. Based on the values reported by Ayre and Scally (2014), (Ayre & Scally, 2014) the CVR was a minimum of 0.538 at the $p=0.05$ significance level for 13 experts. With the adjustments made in line with the expert opinions, the CVR of the questionnaire was found to be 0.9423 and the final version of the questionnaire contained 8 questions.

Fear of COVID-19 Scale:

This scale, developed by Ahorsu et al. (2020), (Ahorsu et al., 2022) was adapted into Turkish by Bakioglu et al. (2020). (Bakioğlu et al., 2021). Consisting of a single dimension and 7 items, it is a 5-point Likert-type scale (1 = I strongly disagree with 5 = I strongly agree). There is no reverse item in the scale, and the total score obtained from all items reflects the level of fear of Coronavirus

(COVID-19) experienced by the individual. The scores that can be obtained from the scale range from 7 to 35. A high score from the scale means experiencing a high level of fear of coronavirus. In the Turkish version, the Cronbach's alpha internal consistency coefficient was calculated by using confirmatory factor analysis and item analysis, and the coefficient for the reliability of the scale was .88. (Bakioğlu et al., 2021). For this study, the Cronbach's alpha internal consistency coefficient was 91.

Data Analyses

The data obtained in the research were analyzed using SPSS for Windows 25.0. Descriptive statistical methods (number, percentage, mean, and standard deviation) were used in the evaluation of the data. For variables with continuous and normal distribution; Minimum, maximum, mean and standard deviation values were used, and percentage values were used for categorical variables. In addition to the normality tests whether the data is normally distributed or not, with histogram, Q-Q graph and box-plot graphics; skewness and kurtosis; It can be evaluated with distribution measures such as the coefficient of variation (Hayran&Hayran., 2011). In order to ensure normality, the values should be observed close to a 45-degree line in the scattering diagram of the data and should be positioned by centered the median line of the box in the box line graph (Büyüköztürk., 2011). The normal distribution was checked with conformity tests of normality and kurtosis skewness values. The normal distribution of the data depends on the skewness and kurtosis values being between ± 3 (Shao & Zhou, 2002). In this study, the Skewness value for the fear of COVID-19 scale scores was 0.720 (S.E: 0.14) and the Kurtosis value was -0.288 (S.E: 0.207). The Skewness value of the stigmatizing attitude questionnaire scores was 1.038 (S.E: 0.104), and the Kurtosis value was 0.375 (S.E: 0.207). It was determined that the scale and questionnaire scores met the assumption of normal distribution. Therefore, in the comparison of the quantitative data, the independent samples t-test was used for

paired groups, one-way analysis of variance for comparison of more than two groups, and the Bonferroni paired comparison test to determine from which group the difference originated. The relationship between the Fear of COVID-19 Scale and the stigmatizing attitude questionnaire was examined using Pearson's correlation coefficient. When interpreting correlation analyses, values between 0.01-0.029 were low; values between 0.30 and 0.70 were considered moderate and values between 0.71 and 0.99 were considered high correlated values (Köklü et al.,2019).. In addition, in this study, since the age of the participants was not categorical and was expressed with mean and standard deviation (mean: 29.43±11.28), correlation analysis was performed to test the relationship.

Data Collection

The research data were collected online with a questionnaire created using the Google Forms application. The researchers delivered the surveys they created in the Google Forms application to the participants via online platforms such as social media, whatsapp and e-mail. Participants who met the inclusion criteria (over the age of 18, could read and write in Turkish, and agreed to participate in the study) answered the forms.

Ethical Approval

In order to carry out the research, ethics committee approval was obtained from the scientific research and publication ethics committee of a university (decision no. 93 dated 09/09/2021). In addition, consent was obtained from the participants included in the study with the online informed consent form prescribed by the ethics committee, and the study was conducted in accordance with the principles of the Declaration of Helsinki.

RESULTS

Demographic Characteristics

According to the findings we obtained, the participants were in the 18-66 age range (mean: 29.43±11.28), 64.6% were women, 30.8% had children, and the number of children was 1 or 2

(mean: 1.69±0.46). Moreover, 41.4% of the participants had associate degree/undergraduate degrees and 80.2% were working in sectors other than healthcare. While 38.8% of the participants had COVID-19 previously, 79.9% had a relative with COVID-19, and 96.6% received a COVID-19 vaccine.

Stigmatizing Attitude Survey Scores According to Demographic Characteristics

As seen in Table 1, there was a statistically significant difference between the stigmatizing attitude questionnaire scores according to the education level of the participants ($p<0.05$). The scores of the participants with primary level education were higher than those of the participants with other education levels. The scores of the participants who did not have relatives with COVID-19 were higher than those of the participants whose relatives did have COVID-19, and the difference between them was statistically significant ($p<0.05$). The scores of the participants whose relatives had died due to COVID-19 were higher than those of the participants who had not lost relatives, and the difference was significant ($p<0.05$) (Table 1)

Fear of COVID-19 Scale Scores According to Demographic Characteristics

There was a statistically significant difference between the Fear of COVID-19 Scale scores according to the sex of the participants, and the scale scores of the female participants were higher than those of the male participants ($p<0.05$). In addition, the scores of the participants with primary level education were higher than those of the participants with high school and graduate education levels, and the difference was statistically significant ($p<0.05$). The scores of the participants who had had COVID-19 previously were higher than those of the participants who had not, and the difference was statistically significant ($p<0.05$). Moreover, the scores of the participants who had a relative who had died due to COVID-19 were higher than those of the participants who had not

lost a relative, and the difference was significant ($p<0.05$). Finally, the scores of the participants who had received a COVID-19 vaccine were higher than

those of the participants who were not vaccinated, and there was a statistically significant difference ($p<0.05$) between them (Table 2).

Table 1: Stigmatizing attitude survey scores by demographic characteristics

Characteristic	Mean±SD	Test Value	p (Post Hoc)
Sex			
Female	14.01±6.72	-0.326 ^t	0.745
Male	14.21±6.73		
Marital status			
Single	14.06±6.78	-0.117 ^t	0.907
Married	14.13±6.61		
Status of having a child			
Yes	14.35±6.66	0.627 ^t	0.531
No	13.96±6.75		
Educational level			
Primary education ¹	18.39±8.25	10.976 ^f	0.000*
High school ²	14.21±6.41		
Ass.deg/ Undergraduate ³	14.01±6.65		(1>2,3,4)
Graduate or higher ⁴	12.04±5.59		(2>3)
Sector			
Health sector	12.99±6.66	-1.907 ^t	0.057
Others	14.35±6.72		
Previous COVID-19 disease status			
Yes	14.31±6.73	0.636 ^t	0.525
No	13.94±6.72		
Status of having COVID-19 patients in their relatives			
Yes	13.73±6.47	-2.96 ^t	0.023*
No	15.5±7.51		
The state of being relative to someone who died due to COVID-19			
Yes	15.16±7.33	2.750 ^t	0.006*
No	13.47±6.28		
Any COVID-19 vaccination status			
Yes	14.10±6.64	0.302 ^t	0.766
No	13.47±9.01		

Ass.deg: Associate degree * $p<0.05$ ^t:independent sample t test ^f:one-way analysis of variance

Table 2: COVID-19 Fear scale scores by demographic characteristics

Characteristic	Mean±SD	Test Value	p (PostHoc)
Sex			
Female	16.58±7.21	3.044 ^t	0.002*
Male	14.66±6.89		
Marital status			
Single	15.93±7.06	0.155	0.877
Married	15.83±7.39		
Status of having a child			
Yes	16.24±7.48	0.740 ^t	0.460
No	15.75±7.01		
Educational level			
Primary education ¹	18.53±9.01	2.627 ^f	0.050*
High school ²	15.58±7.21		
Ass.deg/ Undergraduate ³	15.8±7.08		(1>2,4)
Graduate or higher ⁴	15.4±6.03		
Sector			
Health sector	16,45±7,21	0.888 ^t	0.375
Others	15,77±7,14		
Previous COVID-19 disease status			
Yes	16.70±7.80	2.038 ^t	0.042*

No	15.39±6.68		
Status of having COVID-19 patients in their relatives			
Yes	15.94±7.26	0.253 ^t	0.801
No	15.75±6.76		
The state of being relative to someone who died due to COVID-19			
Yes	17.32±7.82	3.412 ^t	0.001*
No	15.09±6.62		
Any COVID-19 vaccination status			
Yes	16.06±7.13	2.762 ^t	0.006*
No	11.47±6.48		

Ass.deg: Associate degree *p<0.05 ^t:independent sample t test ^f:one-way analysis of variance

A statistically significant and positive low level correlation was found between the age of the participants and the Fear of COVID-19 Scale scores (r: 0.089; p<0.05). There was no statistically

significant relationship between the age of the participants and the scores of the stigmatizing attitude questionnaire (p>0.05) (Table 3).

Table 3: Relationship between COVID-19 fear scale and stigmatizing attitude questionnaire and age

		COVID-19 Fear Scale	Stigmatizing Attitude Questionnaire
Age	r	0.089*	0.071
	p	0.037	0.093
	N	555	555

*p<0.05

The correlation analysis performed to test the relationship between the Fear of COVID-19 scale and the stigmatizing attitude questionnaire used in this study is shown in Table 4. There was a

statistically significant positive and moderate level correlation between the Fear of COVID-19 Scale scores and the stigmatizing attitude questionnaire scores (r: 0.377; p<001) (Table 4).

Table 4: Relationship between fear of COVID-19 scale and stigmatizing attitude questionnaire

		Stigmatizing Attitude Questionnaire
COVID-19 Fear Scale	r	0.377*
	p	0.000
	N	556

*p<0.01

DISCUSSION

In this study, the relationship between the stigmatizing attitudes of Turkish society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak was examined.

It was observed that the participants with a lower education level had higher stigmatizing attitudes towards healthcare professionals (p<0.05). In a previous study, those with lower education levels had higher social stigma scores (Zhang et al., 2021). That study supports this finding. Considering that

knowledge and awareness increase as the level of education increases, this finding is not surprising.

In this study, the participants who did not have relatives with COVID-19 exhibited more stigmatizing attitudes towards healthcare workers compared to those whose relatives did have the disease (p<0.05). In another study, it was reported that people with a relative with COVID-19 are stigmatized (Jafree et al., 2020). That study supports this finding. Since the participants who had relatives with COVID-19 experienced stigma and faced the negative consequences of this

experience, it is expected that they will display less stigmatizing attitudes towards healthcare professionals. Furthermore, the participants who had relatives with COVID-19 may have witnessed the disease process up close. Therefore, they may have exhibited a less stigmatizing attitude as they showed gratitude and an empathic approach to the healthcare workers who are battling the COVID-19 outbreak under difficult circumstances.

In this study, the participants whose relatives had died due to COVID-19 displayed more stigmatizing attitudes towards healthcare workers compared to those who had not lost relatives ($p < 0.05$). This finding can be explained by the grieving process. Individuals may have more difficulty with this process in the face of unexpected death and may resort to blaming others (Özel & Özkan, 2020). Individuals who have lost relatives due to COVID-19 may blame healthcare workers for the loss, which may lead to their displaying a stigmatizing attitude.

According to this research, the female participants, those who had had COVID-19 previously, those who had a relative who had died due to COVID-19, and those who had received a COVID-19 vaccine had greater fear of COVID-19 ($p < 0.05$). Studies in the literature (Andrade et al., 2022; Broche-Pérez et al., 2022; Sánchez-Teruel et al., 2022; Trapp et al., 2022). reveal that female participants experience greater fear of COVID-19 than males, and this study is consistent with this. Burani and Nelson reported that women show a greater startle response than men against an unforeseen threat (Burani & Nelson, 2020). In this context, considering the unpredictable nature of COVID-19 and the threat to life, it is understandable that women experience more fear than men.

This finding that participants who had previously had COVID-19 experienced more fear of COVID-19 isn't consistent with the research findings published by Kalafatoğlu and Yam (2021) (Kalafatoğlu & Yam, 2021). This finding can be explained by the fact that individuals do not want to experience COVID-19 and social isolation, which

is a negative experience, and this triggers fear of COVID-19.

The fact that the participants who had a relative who had died due to COVID-19 experienced more fear of COVID-19 suggests that the losses triggered the fear of death in individuals and therefore they experienced more fear of COVID-19.

According to this findings, participants who had received a COVID-19 vaccine had more fear of COVID-19. Bendau et al. (2021) found that anxiety and health-related fears related to COVID-19 were associated with higher vaccine acceptance, which supports this finding (Bendau et al., 2021). Therefore, the fact that the participants who had received a COVID-19 vaccine had more fear of COVID-19 can be interpreted as the participants getting the vaccine due to their fear of the virus.

As a result of the correlation analysis, it was observed that there was a statistically significant positive correlation between the Fear of COVID-19 Scale scores and the stigmatizing attitude questionnaire scores ($r: 0.377$; $p < 0.001$). In other words, as the fear of COVID-19 increases, the stigmatizing attitude towards healthcare professionals increases. In a previous study, stigma towards COVID-19 was associated with a high level of fear of COVID-19 (Cassiani-Miranda, Campo-Arias, et al., 2021). Similarly, in another study, high fear of COVID-19 was associated with high stigma (Haddad et al., 2021).

In a qualitative study conducted with healthcare professionals, all participants felt stigmatized and some of the participants cited the fear of being infected as the reason for stigmatization by people (Kwaghe et al., 2021). To the best of this knowledge, there are limited studies in the literature examining the relationship between the stigmatizing attitudes of society towards healthcare workers and the fear of COVID-19 during the COVID-19 outbreak. Similar to this research finding, Cassiani et al. (2021), in their study with university students, concluded that high stigma/discrimination against healthcare professionals is associated with high fear of

COVID-19(Cassiani-Miranda, Álvarez-Solorza, et al., 2021).

Another similar result was reported by Taylor et al. (2020) (Taylor et al., 2020). In their study, it was reported that more than a third of the individuals who participated in the survey avoided healthcare workers due to fear of infection (Taylor et al., 2020). This finding is consistent with the literature. Fear of the unknown was thought to be at the root of the stigma associated with COVID-19 (Social Stigma Associated with COVID-19, n.d.)

However, the fact that the stigmatizing attitude towards healthcare professionals is associated with the fear of COVID-19 shows that healthcare professionals are seen as a source of infection by society. This suggests that the public has inaccurate or insufficient information about COVID-19 and the working environment (use of personal protective equipment) of healthcare workers.

Limitations

The online data collection process and 556 participants are the limitations of this study.

CONCLUSION

The level of education and the presence of a relative who had died due to COVID-19 predict the stigmatizing attitude towards healthcare workers and fear of COVID-19. As the fear of COVID-19 increases among the public, the stigmatizing attitude towards healthcare professionals increases.

It is recommended that nurses, as the healthcare professionals in closest contact with the public, provide correct information about COVID-19 and engage in anti-stigmatization activities, and that research with wider participation be carried out in line with this study

REFERENCES

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2022). The Fear of COVID-19 Scale: Development and Initial Validation. *International Journal of Mental Health and Addiction*, 20(3), 1537–1545. <https://doi.org/10.1007/s11469-020-00270-8>
- Andrade, E. F., Pereira, L. J., Oliveira, A. P. L. de, Orlando, D. R., Alves, D. A. G., Guillarducci, J. de S., & Castelo, P. M. (2022). Perceived fear of COVID-19 infection according to sex, age and occupational risk using the Brazilian version of the Fear of COVID-19 Scale. *Death Studies*, 46(3), 533–542. <https://doi.org/10.1080/07481187.2020.1809786>
- Atac, M., & Kaplan, A. (2021). Psychological Effect of the COVID-19 Pandemic on Nurses and Protection of Mental Health. *Journal of Education and Research in Nursing*, 18(Supp1), S54–S59. <https://doi.org/10.5152/jern.2021.58855>
- Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: Revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development*, 47(1), 79–86. <https://doi.org/10.1177/0748175613513808>
- Bagcchi, S. (2020). Stigma during the COVID-19 pandemic. *The Lancet. Infectious Diseases*, 20(7), 782. [https://doi.org/10.1016/S1473-3099\(20\)30498-9](https://doi.org/10.1016/S1473-3099(20)30498-9)
- Bakioğlu, F., Korkmaz, O., & Ercan, H. (2021). Fear of COVID-19 and Positivity: Mediating Role of Intolerance of Uncertainty, Depression, Anxiety, and Stress. *International Journal of Mental Health and Addiction*, 19(6), 2369–2382. <https://doi.org/10.1007/s11469-020-00331-y>
- Bendau, A., Plag, J., Petzold, M. B., & Ströhle, A. (2021). COVID-19 vaccine hesitancy and related fears and anxiety. *International Immunopharmacology*, 97. <https://doi.org/10.1016/J.INTIMP.2021.107724>
- Bhattacharya, P., Banerjee, D., & Rao, T. S. (2020). The “Untold” Side of COVID-19: Social Stigma and Its Consequences in India. *Indian Journal of Psychological Medicine*, 42(4), 382–386. <https://doi.org/10.1177/0253717620935578>
- Broche-Pérez, Y., Fernández-Fleites, Z., Jiménez-Puig, E., Fernández-Castillo, E., & Rodríguez-Martin, B. C. (2022). Gender and Fear of COVID-19 in a Cuban Population Sample. *International Journal of Mental Health and Addiction*, 20(1), 83. <https://doi.org/10.1007/S11469-020-00343-8>
- Burani, K., & Nelson, B. D. (2020). Gender differences in anxiety: The mediating role of sensitivity to unpredictable threat. *International Journal of Psychophysiology*, 153, 127–134. <https://doi.org/10.1016/J.IJPSYCHO.2020.05.001>
- Büyüköztürk, S. (2011). *Veri Analizi El Kitabı*. Ankara: Pegem Akademi.
- Cassiani-Miranda, C. A., Álvarez-Solorza, I., Campo-Arias, A., Arismendy-López, Y. A., Tirado-Otálvaro, A. F., Bustamante-Montes, L. P., & Toxqui-Tlachino, M. J. G. (2021). Factors associated with the stigma-discrimination complex towards healthcare workers among university students during the coronavirus pandemic in Mexico. *MedRxiv*, 2021.03.14.21253547. <https://doi.org/10.1101/2021.03.14.21253547>
- Cassiani-Miranda, C. A., Campo-Arias, A., Tirado-Otálvaro, A. F., Botero-Tobón, L. A., Upegui-Arango, L. D., Rodríguez-Verdugo, M. S., Botero-Tobón, M. E., Arismendy-López, Y. A., Robles-Fonnegra, W. A., Niño, L., & Scopetta, O. (2021). Stigmatisation associated with COVID-19 in the general Colombian population. *The International Journal of Social Psychiatry*, 67(6), 728–736. <https://doi.org/10.1177/0020764020972445>
- Erkin, Ö. (2021). *Değişen Dünyada Hemşirelik Bilimine Çok Yönlü Yaklaşımlar (Ö. Erkin (ed.))*. Astana Yayınları.
- ERTEM, M. (2020). COVID-19 Pandemisi ve Sosyal Damgalama. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 5(2), 135–138. <https://dergipark.org.tr/pub/ikcusbfd/issue/55773/740099>
- Haddad, C., Bou Malhab, S., Malaeb, D., Sacre, H., Saadeh, D., Mourtada, V., & Salameh, P. (2021). Stigma toward people with COVID-19 among the Lebanese population: a cross-sectional study of correlates and mediating effects. *BMC Psychology*, 9(1), 1–15. <https://doi.org/10.1186/S40359-021-00646-Y/TABLES/5>
- Hayran M.&Hayran M. (2011). *Sağlık Araştırmaları İçin Temel İstatistik. (Birinci Basım)*, Ankara: Omega Araştırma.
- Jafree, S. R., Momina, A. ul, & Naqi, S. A. (2020). Significant Other Family Members and Their Experiences of COVID-19 in Pakistan: A Qualitative Study With Implications for Social Policy. *Stigma and Health*, 5(4), 380–389. <https://doi.org/10.1037/SAH0000269>
- KALAFATOĞLU, M. R., & YAM, F. C. (2021). Bireylerin Covid-19 Korkularının Bazı Değişkenler Açısından İncelenmesi. *Humanistic Perspective*, 3(2), 306–323. <https://doi.org/10.47793/HP.942883>
- Kwaghe, A. V., Kwaghe, V. G., Habib, Z. G., Kwaghe, G. V., Ilesanmi, O. S., Ekele, B. A., Umeokonkwo, C. D., & Balogun, M. S. (2021). Stigmatization and psychological impact of COVID-19 pandemic on frontline healthcare Workers in Nigeria: a qualitative study. *BMC Psychiatry*, 21(1). <https://doi.org/10.1186/S12888-021-03540-4>
- Köklü, N., Büyüköztürk, Ş. &Bokeoglu, Ç. Ö. (2019). *Sosyal Bilimler İçin İstatistik. (22. Baskı)*. Ankara: Pegem Akademik Yayıncılık.L. Williams, J., Gonzalez-Medina, D. J., & Vu Le, Q. (2011). Infectious diseases and social stigma. *Medical and Health Science Journal*, 7, 2–14. <https://doi.org/10.15208/MHSJ.2011.127>
- Lin, C.-Y. (2020). Social reaction toward the 2019 novel coronavirus (COVID-19). *Social Health and Behavior*, 3(1), 1. https://doi.org/10.4103/shb.shb_11_20

Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232–235. <https://doi.org/10.1590/1516-4446-2020-0008>

ÖZEL, Y., & ÖZKAN, B. (2020). Kayıp ve Yasa Psikososyal Yaklaşım. *Psikiyatride Güncel Yaklaşımlar*, 12(3), 352–367. <https://doi.org/10.18863/PGY.652126>

Pasay-an, E., Alshammari, F., Mostoles, R., Gattud, V., Cajigal, J., & Buta, J. (2022). [A qualitative study on nurses' experiences with social stigma in the context of COVID-19]. *Enfermeria Clinica*, 32(2), 75–82. <https://doi.org/10.1016/J.ENFCLI.2021.05.004>

Sánchez-Teruel, D., Robles-Bello, M. A., Lara-Cabrera, M., & Valencia-Naranjo, N. (2022). Gender implications of the Fear of COVID-19 Scale in the Spanish population: A validation study. *Psychological Trauma: Theory, Research, Practice and Policy*, 14(2), 258–265. <https://doi.org/10.1037/TRA0001062>

Shao, A. T., Zhou, K. Z. (2002). *Marketing research: An aid to decision making*, Cincinnati, Ohio:South-Western/Thomson Learning.

Social Stigma associated with COVID-19. (n.d.). Retrieved September 12, 2022, from <https://www.who.int/docs/default-source/coronaviruse/covid19-stigma-guide.pdf>

Taylor, S., Landry, C. A., Rachor, G. S., Paluszek, M. M., & Asmundson, G. J. G. (2020). Fear and avoidance of healthcare workers: An important, under-recognized form of stigmatization during the COVID-19 pandemic. *Journal of Anxiety Disorders*, 75. <https://doi.org/10.1016/J.JANXDIS.2020.102289>

Trapp, M. D. C., Wiskur, B. J., Suh, J. H., Brand, M. W., Kuhn, K. G., & Rojas, J. (2022). Sex Differences between Medical Students in the Assessment of the Fear of COVID-19. *International Journal of Environmental Research and Public Health*, 19(6). <https://doi.org/10.3390/IJERPH19063372>

Yılmaz, Y., Erdoğan, A., & Hocaoglu, C. (2021). COVID-19 ve Damgalanma. *Kocaeli Tıp Dergisi*, 10(Supp:1), 47–55. <https://doi.org/10.5505/KTD.2021.99266>

Zhang, T. M., Yao, H., Fang, Q., & Ran, M. S. (2021). Public Stigma of COVID-19 and Its Correlates in the General Population of China. *International Journal of Environmental Research and Public Health*, 18(21), 11718. <https://doi.org/10.3390/IJERPH182111718>