

Original Article

## Turkish Validity and Reliability Study of COVID-19 Patients Social Stigmatization Scale: A Sample in Healthcare Professionals

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### Abstract

**Objective:** This study was carried out to adapt “COVID-19 Patients Social Stigmatization Scale” into Turkish and to determine its validity and reliability.

**Methods:** This methodological study was conducted on healthcare professionals who were reached online between December 01 and 20, 2020.

**Results:** As a result of the evaluations and analysis conducted, Cronbach’s alpha coefficient of the scale was found as 0.74 for the total scale. Results of the EFA and CFA confirmed the three factor structure of the scale (discrimination, acceptance and fear).

**Conclusions :** Turkish version of “COVID-19 Patients Social Stigmatization Scale” is a valid and reliable measurement tool to evaluate healthcare professionals’ stigmatization levels for COVID-19 patients.

**Key Words:** COVID-19, Healthcare workers, Patient, Reliability, Stigma scale, Validity

### Introduction

The concept of stigma is defined as “unfair treatment of a person or group for a different characteristics they have” (Sotgiu & Dobler, 2020). Stigmatization in health refers to negative, disparaging, hostile, devaluing and discriminatory attitudes towards a person or a group with a particular disease, the places where the disease is seen and things related to the disease (Turkish Psychiatric Association, 2020). Especially in infectious diseases, individuals may develop stereotypical thoughts with information that is not based on truth or the truth that is distorted due to a situation associated with the disease. As a result, targeted individuals may be stigmatized by being exposed to discrimination (Ozmen & Erdem, 2018; World Health Organization, 2020). It is known that medical stigmatization is experienced intensively since

ancient times (Ertem, 2020). In the historical process, it is stated that the belief has emerged that infectious diseases such as leprosy, plague and AIDS occurred as a result of a guilt or sin of sick individuals and therefore they were punished divinely (Adom & Adu Mensah, 2020).

Due to COVID-19 pandemic that has affected the whole world; the risk of social stigmatization has emerged. It is stated that especially diagnosed patients and the relatives of these patients, individuals close to the patients, healthcare professionals, health organizations, countries, neighbourhoods, individuals returning from abroad and Asian race may be exposed to stigmatization (Canada Center For Occupational Health And Safety, 2020; COVID-19, 2020; Shigemura, Ursano, Morganstein, Kurosawa, & Benedek, 2020). It is reported that the level of stigma associated with COVID-19 is based on

three main factors. These are its being a new and still unknown disease, frequent fear of the unknown and associating this fear with “others” easily (Canada Center For Occupational Health And Safety, 2020)

Individuals who are exposed to stigma may begin to perceive that they are not a member of the society they feel to belong to. Due to the discriminating attitude of individuals in the society, an individual may begin to feel lonely and become withdrawn over time. The emergence of thoughts such as social isolation, guilt, inadequacy, pessimism, hopelessness and despair can pave the way for mental illnesses (Turkish Psychiatric Association, 2020). Other possible consequences of stigmatization on the individual are preventing people from seeking treatment and participating in treatment (Liu et al., 2020), decrease in the level of social support, the individual’s rejecting treatment by hiding the disease (Turkish Psychiatric Association, 2020) and causing social isolation by separation from the outside world (Kadioglu & Hotun Sahin, 2015; Liu et al., 2020). While negatively affecting the targeted person, stigmatization can also affect the family and the individuals around. These people may be stigmatized simply because they are the relative of a stigmatized person (Kadioglu & Hotun Sahin, 2015; Liu et al., 2020). In addition, when the consequences of the concept of stigmatization are considered on the social ground, individuals with a discriminatory attitude may deprive the target person of certain rights and benefits under reasons such as stigma and prejudice (Adom & Adu Mensah, 2020; Sotgiu & Dobler, 2020) .

During the COVID-19 pandemic, when the individuals who are sick are exposed to stigmatization, it is important that the nurse treats the patient as a whole and makes the necessary interventions by detecting the possible psychosocial problems at an early stage (Ertem, 2020). In infectious diseases, with the fear of infection, healthcare personnel may show various reactions ranging from abusing care, humiliating and even rejecting the patient. (Brooks et al., 2020; Sotgiu & Dobler, 2020). Professional ethic codes create a strong guide for healthcare workers and oblige healthcare professionals to comply with the ethical principles of “not harming” and “serving” individuals under their care (Ozsoy & Donmez, 2017)The ethic codes published by ICN include the statement that “the nature of nursing includes respect for human

rights, the right to live, respect and appreciation” (International Council of Nurse (ICN)). Prejudice against the disease is a serious problem, especially among healthcare professionals working in the prevention and treatment of infectious diseases. Discriminatory behaviors of healthcare professionals affect patients’ processes of decision making about getting support. Individuals who think that they will be exposed to discrimination get away from the options of resorting to voluntary counselling, support and treatment organizations (Adom & Adu Mensah, 2020; Ramaci, Barattucci, Ledda, & Rapisarda, 2020) . One of the leading attempts for reducing stigma should be healthcare professionals’ awareness of their internal negative attitudes towards COVID-19 patients and turning these into positive attitudes (Adom & Adu Mensah, 2020; Zhang et al., 2020).

There are no scales in Turkey measuring the social stigmatization levels of healthcare personnel towards COVID-19 patients. This study was planned to conduct the Turkish validity and reliability of COVID-19 Patients Social Stigmatization Scale developed by Ramaci et al. (2020).

### Research Questions

1.1 Is “COVID-19 Patients Social Stigmatization Scale” a valid scale for healthcare personnel?

1.2. Is “COVID-19 Patients Social Stigmatization Scale” a reliable scale for healthcare personnel?

### Methods

**Type of the Study:** The study was conducted with a methodological type.

**Population and Sample of the Study:** The survey form prepared with Google Docs program was sent online (e-mail, whatsapp, facebook, instagram) to healthcare professionals, they were asked to fill in the forms and share with healthcare professionals between December 01 and 20, 2020. 327 individuals were reached with this online survey form. It is stated in literature to reach a sample of at least 5-10 times of the number of items in adapting a scale to another culture (Seçer, 2015). Therefore, the study was completed with 327 healthcare professionals within the specified dates.

**Data Collection Instruments:** The data were collected online by the researchers by using

“Personal Information Form” and “COVID-19 Patients Social Stigmatization Scale (CPSSS)”

### Personal Information Form

The form prepared by the researchers includes 6 questions to find out the socio-demographic characteristics of the participants (age, gender, level of education, profession, economic status).

**COVID-19 Patients Social Stigmatization Scale (CPSSS):** The scale which was developed by See et al. (2011) to evaluate the knowledge and attitudes of healthcare professionals towards HIV/AIDS patients was adapted to healthcare professionals for COVID-19 patients by Ramaci et al. (2020) (Ramaci et al., 2020). The scale which was edited by Ramaci et al. (2020) was adapted as a 12-item and 4-Likert type scale with the removal of a sub-scale from the original scale related with drug users. The scale includes three factors as “Discrimination (1-4 items)”; “Acceptance of COVID-19 Patients (5-8)” and “Fear (9-12)”. The items in the scale are scored as Strongly disagree= 0, Disagree = 1, Agree = 2 and Strongly agree = 3. Questions 5 and 8 are reversely coded. The scale is used to assess healthcare professionals’ social stigma towards patients due to COVID-19. It is stated that positive professional behavior increases as the score from the scale increases. In the original scale adapted by Ramaci et al. (2020), Cronbach alpha internal consistency coefficient was found as 0.83 for “Discrimination” sub-dimension, as 0.56 for “Acceptance of COVID-19 Patients” sub-dimension and as 0.72 for “fear” sub-dimension (Ramaci et al., 2020).

**Data Collection:** The study was carried online (e-mail, whatsapp, facebook, instagram) by using “snowball sampling technique” with the data collection form prepared in GoogleDocs program between December 01 and 20, 2020. In snowball sampling method, the process of creating sample starts with reaching one of the individuals that the study will be conducted with. The researcher tries to reach new people by asking the individuals who they can contact with. Data collection phase of the study is completed as soon as data saturation is reached as a result of the research that is carried out by the researcher in a chain (Yagar & Dokme, 2018) . Therefore, the study was completed with 327 healthcare professionals between the specified dates. In addition, the survey form was reapplied to 53 individuals with an interval of 15 days for test-retest.

**Data Analysis:** Statistical software program SPSS 17.0 and LISREL 8.8 were used in the analysis of the data. In data analysis, the information in the Personal Information Forms of the individuals was assessed with numbers and percentage. In terms of validity, expert opinions, Barlett Test, Kaiser-Meyer-Olkin Index (KMO), Exploratory Factor Analysis, Confirmatory Factor Analysis, Principal Components Analysis were applied to find out content and construct validity. In terms of reliability analysis, Cronbach’s a Coefficient, Pearson Correlation analysis, item-total score correlation were used to find out internal consistency and homogeneity.

**Ethical Considerations:** Written permission was taken from the author of the scale to adapt the scale into Turkish. The study was carried out in accordance with the principles of Helsinki Human Rights Declaration. Approval (2020/11 numbered) was taken from the Ethics Committee of a foundation university for the study.

### Stages in the adaptation of the scale into Turkish:

For language validity of COVID-19 Patients Social Stigmatization Scale, the scale was first translated into Turkish and then back translated. Content validity was conducted to prove both language and culture equivalence and content validity of the items with numerical values. Content Validity Index-CVI is calculated with the percentage of agreement between the opinions of at least 3 and at most 20 experts. In Content Validity Index conducted by using Davis technique, the experts are expected to give one of the responses “not suitable (1)”, “the item should be made suitable (2)”, “suitable, but needs small changes (3)” or “very suitable (4)”. In this technique, “Content Validity Index (CVI)” is obtained by the dividing the number of experts who marked options (4) and (3) to the number of total experts. As a result of the analysis made, it is stated that the item is sufficient in terms of content validity if the CVI is greater than 0.80. It is stated that the item with low CVI can be eliminated (Davis,1992). As a result of the analysis, it was found that all of the items except item 5 were found to have CVI scores higher than 0.80. It was determined by 7 experts that item 5 was not suitable in terms of meaning and suitability for Turkish culture. It is stated in literature that at this stage, experts can change or completely reject irrelevant, insufficient and ambiguous items (Jesus & Valente, 2016; World Health Organization (WHO), 2017). For this reason, after item 5 was re-evaluated by the

researchers, it was decided that it was not suitable. Therefore, item 5 was deleted and the scale was used with 11 items. After content validity was completed, construct validity was used to determine the validity of the scale and test-retest reliability, internal consistency and item analysis method were used to determine the reliability of the scale (Capik, Gozum, & Aksayan, 2018; Gungor, 2016).

## Results

When the demographic features of the healthcare professionals in the study were analysed, it was

found that mean age of the healthcare professionals was  $29.37 \pm 6.69$ .

It was found that 78.9% of the healthcare professionals were female, 57.2% were single, 72.2% had undergraduate degree and 72.2% were nurses. It was found that 71.9% of the healthcare professionals were providing care to Covid-19 positive patients, 41% did not want to provide service to Covid-19 positive patients and 88.7% did not have Covid-19 (Table 1)

**Table 1. Demographic features of healthcare professionals**

		n	%
<b>Gender</b>	Female	258	78.9
	Male	69	21.1
<b>Marital status</b>	Married	140	42.8
	Single	187	57.2
<b>Level of education</b>	High school	20	6.1
	Associate	30	9.2
	Undergraduate	236	72.2
	Postgraduate	41	12.5
<b>Profession</b>	Doctor	7	2.1
	Nurse	236	72.2
	Midwife	51	15.6
	Other*	33	10.1
<b>The state of providing service to Covid-19 positive patients</b>	Yes	235	71.9
	No	92	28.1
<b>The state of not wanting to provide service to Covid-19 positive patients</b>	Yes	134	41.0
	No	193	59.0
<b>The state of having Covid-19</b>	Yes	37	11.3
	No	290	88.7
<b>Mean age (Mean <math>\pm</math>SD)</b>		29.37 $\pm$ 6.69	

\* Pharmacist, Paramedic, Emergency medical technician, Radiology technician

**Table 2. Results of the Kaiser–Meyer–Olkin measure of sampling adequacy and Bartlett’s test of sphericity**

Test	Results	
Kaiser–Meyer–Olkin measure of sampling adequacy	0.77	p < 0.001
Bartlett’s test	Approx. Chi-square	1104.319
	df	55
	Sig.	0.00

**Table 3. Mean Scores, Item-Total Score Correlation Coefficients, Factor Loads, Alpha Coefficients and the Explained CPSSS Variance**

Item Load	Factor Load	Mean (SD)	Corrected Item-total Correlations	Cronbach's Alpha if Item Deleted
1	0.78	0.58 (0.73)	0.38	0.72
2	0.76	0.48 (0.63)	0.41	0.72
3	0.85	0.64 (0.71)	0.42	0.72
4	0.73	1.17 (0.92)	0.39	0.72
5	0.72	1.13 (0.92)	0.41	0.72
6	0.79	0.91 (0.81)	0.43	0.72
7	0.77	1.22 (0.89)	0.52	0.70
8	0.81	2.63 (0.64)	0.26	0.74
9	0.77	2.15 (0.81)	0.42	0.72
10	0.72	2.17 (0.86)	0.27	0.74
11	0.75	2.25 (0.77)	0.36	0.73
<b>%Variance Explained</b>				<b>Total = 0.63</b>
<b>Cronbach’s a</b>				<b>Total =0.74</b> <b>Discrimination=0.79</b> <b>Acceptance of COVID-19 Patients = 0.70</b> <b>Fear=0.77</b>

**Table 4. Confirmatory Factor Analysis Results**

Fit criteria	Found	Appropriate	Acceptable
$\chi^2/df$	2.18	<2	<5
RMSEA	0.060	<0.05	<0.08
CFI	0.97	>0.95	>0.90
RMR	0.034	<0.05	<0.08
SRMR	0.054	<0.05	<0.08
GFI	0.95	>0.95	>0.90
AGFI	0.92	>0.95	>0.90
NFI	0.94	>0.95	>0.90

RMSEA : Root Mean Square Error of Approximation; CFI : Comparative Fit Index; RMR :Root Mean Square Residual ; SRMR : Standardized Root Mean Square Residual; NFI: Normed Fit Index; GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index

### Validity

**Exploratory Factor Analysis (EFA):** When Table 2 is analysed, it can be seen that KMO value of the scale is 0.77, while Bartlett Sphericity test value is  $\chi^2=1104.319$  (df = 55;  $p=0.000$ ) and significant. < .50 KMO value means that factor analysis cannot be continued,  $\geq .90$  KMO value shows perfect sampling adequacy (Buyuköztürk, 2017; Çokluk, Şekercioğlu, & Buyuköztürk, 2016). KMO value obtained in the present study shows that sample adequacy has been achieved. The values obtained in the study show that the data are suitable for factor analysis and that analyses can be continued (Akyuz, 2018).

It is stated that the variance rate explained by a scale should be at least above 52% (Seçer, 2015). Factor analysis showed that the scale explained 63% of total variance and had 3 sub-dimensions. When the factor loads of the scale items were checked by using Varimax rotation technique, it was found that all of these values were above 0.32 (0.72-0.85); thus, it was found that there were no items that should be deleted (Seçer, 2015). (Table 3).

**Confirmatory Factor Analysis (CFA):** After showing the 3-factor structure of the scale with exploratory factor analysis, confirmatory factor analysis was conducted to confirm this structure obtained. The factor structure obtained as a result of the confirmatory factor analysis model shows

that the 3-factor scale structure obtained with EFA is confirmed. CFA fit values are shown in Table 4.

In Table 4, confirmatory factor analysis (CFA) fit index values of CPSSS were found as  $\chi^2=89.73$ , df= 41 ( $p<0.05$ ),  $\chi^2/df=2.18$ , RMSEA=0.060, CFI = .97, RMR = 0.034, SRMR = 0.054, GFI= 0.95, AGFI= 0.92 and NFI = 0.94 and model fit was found to be acceptable (Capik, 2014). Path diagram obtained from confirmatory factor analysis is shown in Figure 1.

As a result of the EFA and AFA, it was found that unlike the original scale form, Turkish form of CPSSS was confirmed as an 11 item and three sub-dimension scale. All findings obtained showed that the scale has high validity in Turkish culture.

**Reliability:** In the analyses conducted to find out the reliability of the scale, the data were reapplied two weeks later to 53 individuals on whom EFA was conducted and pre-test post-test correlation was found as 0.89. This value shows that the scale has high external reliability and a stable structure (Tavşanel, 2019) .

In addition, Cronbach's  $\alpha$  internal consistency was tested to find out the internal reliability of the scale and this value was found as 0.74 for the total scale, as 0.79 for discrimination sub-dimension, as 0.70 for acceptance sub-dimension and as 0.77 for fear sub-dimension. This value

shows that the 11-item 3 sub-dimension scale has high internal consistency (Cokluk et al., 2016; Ozdamar, 2017). (Table 3). When the item-total correlation coefficients of the scale were examined, it was found that all item-total correlation coefficients were above 0.25 (0.26-0.52).

## Discussion

In this part, findings regarding the 11-item and 3 sub-dimension CPSSS were discussed.

While determining the construct validity of CPSSS, first of all KMO and Barlett Test were made to evaluate the adequacy of sample size. As a result of the analyses, KMO value was found as 0.77 and Barlett Test results ( $\chi^2 = 1104.319$ ;  $p < 0.001$ ) were found to be significant. It is stated in literature that for adequate sample size, KMO value should be equal to or greater than 0,50 and Barlett Test should be significant (Cokluk et al., 2016). These results show that sample size is adequate and sufficient for factor analysis.

“Principle components analysis” and “Varimax rotation method” were used to find out the factor structure of CPSSS. As a result of the analyses, it was found that 11-item CPSSS had a 3-factor (sub-dimension) structure which explained 63% of the total variance with an eigenvalue of  $>1.00$ . The original scale also has three sub-dimensions (Ramaci, 2020)

Factor loads matrices were examined to find out which items the 3 sub-dimensions consisted of. As a result of EFA for the validity of CPSSS, factor loads were found to range between 0.72 and 0.85. In the original scale by See et al. (2011) factor loads were found to range between 0.41 and 0.87 (See et al., 2011). It is stated in literature that factor loads should be  $\geq 0.30$  (Buyukozturk, 2017; Secer, 2015). No items were deleted from the scale since there were no items with a factor load of  $< 0.30$ . When it was examined which sub-dimensions the items were distributed in according to item loads, it was found that items 1,2,3,4 were in “Discrimination” sub-dimension, items 5,6,7 were in “Acceptance of COVID-19 patients” sub-dimension and items 8,9,10,11 were in “Fear” sub-dimension, as in the original scale.

In confirmatory factor analysis, the index values for the analysis of model fit were calculated as  $\chi^2 = 89.73$ ,  $df = 41$  ( $p < 0.05$ ),  $\chi^2/df = 2.18$ ,  $RMSEA = 0.060$ ,  $CFI = 0.97$ ,  $RMR = 0.034$ ,  $SRMR = 0.054$ ,  $GFI = 0.95$ ,  $AGFI = 0.92$  and  $NFI$

$= 0.94$ . As a result of the related fit index values, the model was found to be acceptable (Capik, 2014). CFA which was carried out to confirm the exploratory factor analysis of the scale also confirmed the validity of the scale’s 3 sub-dimension structure.

Cronbach Alpha coefficient is found to evaluate the internal consistency of the scale. A Cronbach Alpha coefficient of  $\geq 0.70$  shows that the measurement instrument is adequate to be used in researches. In the present study, Cronbach Alpha coefficient was found as 0.74 for the total scale, as 0.79 for “Discrimination” sub-dimension, as 0.70 for “Acceptance of COVID-19 patients” sub-dimension and as 0.77 for “Fear” sub-dimension. In the original scale adapted by Ramaci et al. (2020), Cronbach Alpha internal consistency coefficient was found as 0.83 for “Discrimination” sub-dimension, as 0.56 for “Acceptance of COVID-19 patients” sub-dimension and as 0.72 for “Fear” sub-dimension (Ramaci et al., 2020). In the original scale by See et al. (2011), Cronbach Alpha internal consistency coefficient was found as 0.72 for “Discrimination” sub-dimension, as 0.69 for “Acceptance” sub-dimension and as 0.75 for “Fear” sub-dimension (See et al., 2011). These results show that CPSSS has adequate internal consistency.

As a result of the analyses in the study, it was found that all of the item-total correlation coefficient values were significant at  $p < 0.01$  significance level and item-total correlation coefficient values of the items were found to range between 0.26 and 0.56. It is stated in literature that correlation value of each item in the scale should be higher than 0.20, which is the limit value (Ozdamar, 2017). These results show that none of the scale items had problems.

Test-retest method was used to test the invariance of CPSSS over time (Tavsanel, 2019). The test was reapplied to a sample group of 53 individuals with an interval of 15 days. High positive and significant association was found between pre-test and post-test measurement results ( $r = 0.89$ ,  $p < 0.001$ ). The result obtained showed that the scale had a high consistency over time and that reliable results could be obtained for more than one application.

**Conclusion:** According to the results obtained, the scale consists of 11 items and 3 sub-dimensions. EFA and CFA confirmed the three-factor structure of the scale. The scale was found

to have high cronbach's  $\alpha$  internal consistency coefficient, item total correlation and test-retest analysis correlation.

It is possible to utilize the CPSS as an assessment tool useful for measuring health professionals' social stigmatization levels towards COVID-19 patients. Social stigmatization applied to patients with Covid disease negatively affects both the psychological and social health of patients and are also preventing people from seeking treatment and participating in treatment.

### Compliance with Ethical Standards

**Conflict of Interest :** The authors declare that they have no conflict of interest.

**Ethical Approval :** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

**Informed Consent :** Informed consent was obtained from all individual participants included in the study

**Data Availability Statements :** The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

### References

- Adom, D., & Adu Mensah, J. (2020). The Psychological Distress and Mental Health Disorders from COVID-19 Stigmatization in Ghana. *Social Sciences & Humanities Open*, 1-22.
- kyuz, H. E. (2018). Confirmatory factor analysis for construct validity: An applied study. *Bitlis Eren University Journal of Science*, 7(2), 186-198.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*.
- Buyukozturk, S. (2017). *Data analysis handbook for social sciences statistics, research pattern spss applications and interpretation*. (23 ed.). Ankara: Pegem Academy.
- Canada Center For Occupational Health And Safety. (2020). Coronavirus (COVID-19) Tips. Preventing Stigma. Retrieved from. <https://www.ccohs.ca/newsletters/hsreport/issues/current.html#hsreport-ontopic>
- COVID-19, (2020). Reducing Stigma, . Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/reducing-stigma.html>
- Capik, C. (2014). Use of confirmatory factor analysis in validity and reliability studies. *Anatolian Journal of Nursing and Health Sciences*, 17(3), 196-205.
- Capik, C., Gozum, S., & Aksayan, S. (2018). Intercultural scale adaptation stages, language and culture adaptation: updated guideline. *Florence Nightingale Journal of Nursing*, 26(3), 199-210.
- Cokluk, O., Sekercioglu, G., & Buyukozturk, S. (2016). *Multivariate statistics SPSS and Lisrel applications for social sciences*. (2 ed.). Ankara: Pegem Academy.
- Ertem, M. E. (2020). COVID-19 Pandemic and Social Stigma. *Izmir Katip Celebi University Faculty of Health Sciences Journal*, 5(2), 135-138.
- Gungor, D. (2016). Guide to Development and Adaptation of Measurement Tools in Psychology. *Turkish Psychology Articles*, 19(38), 112-114.
- International Council of Nurse (ICN). Retrieved from <http://www.icn.ch>
- Jesus, L. M., & Valente, A. R. (2016). Cross-cultural adaptation of health assessment instruments.
- Kadioglu, M., & Hotun Sahin, N. (2015). Stigmatization and woman. *Health and Society*, 25(3), 3-9.
- Liu, X., Shao, L., Zhang, R., Wei, Y., Li, J., Wang, C., Zhou, F. (2020). Perceived social support and its impact on psychological status and quality of life of medical staffs after outbreak of SARS-CoV-2 pneumonia: a cross-sectional study. Available at SSRN 3541127.
- Ozdamar, K. (2017). *Statistical Data Analysis with Package Programs* Eskişehir: Kaan Kitabevi.
- Ozmen, S., & Erdem, R. (2018). Conceptual Framework of Stigma. *Suleyman Demirel University Journal of Faculty of Economics & Administrative Sciences*, 23(1).
- Ozsoy, S., & Donmez, R. (2017). The First Ethical Codes of the Nursing Profession: Nursing Pledge from Past to Present. *Ege University Faculty of Nursing Journal*, 33(1), 111-122.
- Ramaci, T., Barattucci, M., Ledda, C., & Rapisarda, V. (2020). Social Stigma during COVID-19 and its impact on HCWs outcomes. *Sustainability*, 12(9), 3834.
- Secer, I. (2015). *Practical data analysis with spss and lisrel*. Ankara: Ani.
- See, L.-C., Shen, Y.-M., Chen, C.-L., Huang, T.-M., Huang, Y.-H., Huang, H.-C., & Lin, S.-R. (2011). Professional attitude of health care workers toward serving HIV/AIDS patients and drug users: questionnaire design and evaluation of reliability and validity. *AIDS care*, 23(11), 1448-1455.
- Shigemura, J., Ursano, R. J., Morganstein, J. C., Kurosawa, M., & Benedek, D. M. (2020). Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: Mental health



- consequences and target populations. *Psychiatry and clinical neurosciences*, 74(4), 281.
- Sotgiu, G., & Dobler, C. C. (2020). Social stigma in the time of coronavirus. *Eur Respir J*, 56, 2002461.
- Tavsanel, E. (2019). *Measurement of Attitudes and Data Analysis with SPSS Ankara (6 ed.)*. Ankara: Atlas Publishing. (6 ed.). Ankara Atlas Publishing.
- Turkish Psychiatric Association. (2020). COVID-19 ve damgalama. Retrieved from <https://www.psikiyatri.org.tr/uploadFiles/243202019327-DamgalanmaCOVID.pdf>.
- World Health Organization (WHO). (2017). World Health Organization (WHO). (2017). Process of translation and adaptation of instruments. . Retrieved from [http://www.who.int/substance\\_abuse/research\\_tools/translation/en](http://www.who.int/substance_abuse/research_tools/translation/en)
- World Health Organization, U., IFFR,. (2020). Social Stigma associated with COVID-19. A guide to preventing and addressing social stigma Retrieved from [https://www.epiwin.com/sites/epiwin/files/content/attachments/2020-02-24/COVID19%20Stigma%20Guide%2024022020\\_1.pdf](https://www.epiwin.com/sites/epiwin/files/content/attachments/2020-02-24/COVID19%20Stigma%20Guide%2024022020_1.pdf).
- Yagar, F., & Dokme, S. (2018). Planning of Qualitative Research: Research Questions, Sample Selection, Validity and Reliability. *Gazi Journal of Health Sciences*, 3(3), 1-9.
- Zhang, Z., Liu, S., Xiang, M., Li, S., Zhao, D., Huang, C., & Chen, S. (2020). Protecting healthcare personnel from 2019-nCoV infection risks: lessons and suggestions. *Frontiers of Medicine*, 1-3.