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THE RELATIONSHIP BETWEEN FEAR OF COVID-19 AND PATIENT COMMUNICATION OF MIDWIVES AND NURSES

EBE VE HEMŞIRELERİN COVID-19 KORKUSU İLE HASTA İLETIŞİMİ ARASINDAKİ İLİŞKİ

Nurten ÖZÇALKAP ¹, Sevda TAŞTAN ², Semiha AYDIN ÖZKAN ³, Habip ALMİŞ ⁴

- ¹ Agrı İbrahim Çeçen University, Faculty of Health Sciences, Agrı, Türkiye.
 - ² Söke Fehime Faik Kocagöz State Hospital, Aydın, Türkiye.
 - ³ Adıyaman University, Faculty of Health Sciences, Adıyaman, Türkiye.
 - ⁴ Sincan Training and Research Hospital, Ankara, Türkiye.

ABSTRACT

Objective: This study aims to evaluate the effect of fear of COVID-19 on communication with patients in midwives and nurses.

Methods: The study was conducted with 249 midwives and nurses working in a hospital in Southeast Turkey. "Descriptive Information Form", "COVID-19 Fear Scale" and "Communication Skills Assessment Scale" were used to collect the data. Percentage, Mean, Standard deviation, t test and Pearson correlation test were used to evaluate the data.

Results: Of the participants, 40.6% were midwives, 59.4% were nurses and their mean age was 34.59 ± 6.39 years. The FCV-19S mean score was 19.64 ± 4.76 for the midwives and 19.90 ± 4.16 for the nurses, showing a similar distribution (t=-.459, p=0.647). The nurses (82.15 ± 17.07) had higher CSAS mean score than the midwives (75.83 ± 22.11). In addition, there was a statistically significant weak negative correlation between the FCV-19S and CSAS mean scores of midwives and nurses (r=-0.197, p=0.002).

Conclusion: It was found that midwives and nurses had similar COVID-19 fear scale scores and that their communication skills decreased as their fear of COVID-19 increased.

Keywords: Communication, COVID-19, Fear, Midwifes, Nurses

ÖZET

Amaç: Bu çalışmanın amacı ebe ve hemşirelerde COVID-19 korkusunun hastalar ile iletişimine etkisini değerlendirmektir.

Gereç ve Yöntem: Araştırma Güneydoğuda bulunan bir hastanede çalışan 249 ebe ve hemşire ile gerçekleştirildi. Verilerin toplanmasında "Tanıtıcı Bilgi Formu", "COVID-19 Korkusu Ölçeği" ve "İletişim Becerilerini Değerlendirme Ölçeği" kullanıldı. Verilerin değerlendirilmesinde Yüzdelik, Ortalama, Standart sapma, t testi ve Pearson korelasyon testi kullanıldı.

Bulgular: Katılımcıların %40.6'sı ebe, %59.4'ü hemşire ve yaş ortalamaları 34,59±6,39 olarak bulundu. Ebe (19,64±4,76) ve hemşirelerde (19,90±4,16) COVID-19 korku ölçek puan ortalaması benzer dağılım gösterirken (t=-.459, p=0.647), iletişim becerileri puan ortalaması ebelere (75,83±22,11) göre hemşirelerde (82,15±17,07) daha yüksek olduğu saptandı (t=-2.542, p=0.012). Yapılan korelasyon analizlerinde ebe ve hemşirelerde COVID-19 Korku Ölçeği ile İletişim Becerileri Değerlendirme Ölçeği arasında negatif yönde zayıf düzeyde istatistiksel anlamlı olarak ilişkili olduğu saptandı (r=-0.197, p=0.002).

Sonuç: Ebe ve hemşirelerin COVID 19 korkusu ölçek puanlarının benzer olduğu ve COVID 19 korkusu arttıkça iletisim becerilerinin azaldığı saptandı.

Anahtar Kelimeler: İletişim, COVID-19, Korku, Ebeler, Hemşireler

Sorumlu Yazar / Corresponding Author: Nurten ÖZÇALKAP, Assist. Prof. Dr., Ağrı İbrahim Çeçen University, Faculty of Health Sciences, Agrı, Türkiye *E-mail:* nozcalkap@agri.edu.tr

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INTRODUCTION

The novel coronavirus infection (COVID-19) can cause several symptoms in humans, ranging from asymptomatic mild flu-like symptoms to severe health outcomes such as cough, fever, fatigue, arthromyalgia, diarrhea, anosmia, acute respiratory distress syndrome, coagulopathy, septic shock, interstitial pneumonia, and multiorgan dysfunction. (WHO, 2019). As there is not an effective treatment against the infection yet and the number of infected cases and deaths increases day by day, infection prevention and control is still a basis of the fight against the coronavirus (Arpacıoğlu et al., 2021; Özçalkap et al., 2022; Özgünay et al., 2021).

The disease has both psychological and physiological effects as the infection has been declared as a pandemic, disrupting routine life and causing a feeling of uncertainty, fear of being infected and living in an unsafe world (Khalid et al. 2016; Suwantarat & Apisarnthanarak, 2015). Individuals, societies and states have great responsibilities in the fight against this disease, which spreads very rapidly by its nature and has high mortality rates. Midwives and nurses are involved in the diagnosis and treatment processes of the disease; therefore they play a significant role among those who have duties and responsibilities in the fight against this disease (Özçalkap et al., 2022; Özgünay et al., 2021).

A lack of communication or bad communication causes irreversible damage in the field of health. In addition, if this is due to health workers, it may lead to insecurity and negative judgments in the society against health workers and their hospital. Although it is due to patients, several conflicts may occur with healthcare professionals and patients, and patients with communication problems are considered as a difficult patient group by healthcare professionals. Therefore, the recovery and adaptation periods of patients are prolonged. Negative communication affects both sides psychologically, causes deficiencies in service delivery and acquisition, and negatively affects health service quality (Basol, 2018; Ciftcioğlu & Ordun, 2010; Yalçın & Aştı, 2011).

A proper and effective communication is important both for patients and healthcare professionals (Kumcagiz et al., 2011), allowing healthcare professionals to work faster, with less stress, safely and happily, rising their job satisfaction and increasing patients' willingness to follow-up and treatment (Çiftçioğlu & Ordun, 2010; Yalçın & Aştı, 2011).

Healthcare workers are faced with a higher risk of stress and COVID-19 transmission compared to other segments of the society, because they work on people who are infected or likely to be virus carriers (Gritsenko et al., 2020). Several studies have reported that healthcare workers have fear and anxiety of infecting their family members (Koçak et al. 2021; Özgünay et al. 2021). In China, a total of 1716 healthcare workers were infected by the virus at the peak of the COVID-19 pandemic (Buckley et al. 2020). In addition, 40 of the 138 COVID-19 patients treated in a hospital in Wuhan were healthcare workers (Wu et al. 2020). Healthcare workers who are in constant communication with patients have a substantial risk of contracting COVID-19. By focusing on the fight against infection during the pandemic, the impact of COVID-19 on psychology of healthcare workers is neglected. One study found quite elevated levels of anxiety and fear of contracting COVID-19 in healthcare professionals (Özgünay et al. 2021). In this context, the study was conducted to determine the effect of COVID-19 fear on midwives' and nurses' communication with patients.

MATERIALS AND METHODS

The Research design and sample

This descriptive correlational study was conducted at the Gynecology and Children's Hospital in southeastern Turkey. The study population consisted of midwives and nurses actively working at this hospital. In the study, an attempt was made to reach the entire population (N=272) without selecting a sample. During the data collection process, 272 midwives and nurses were invited to participate in the study. The 249 midwives and nurses who agreed to participate in the study formed the sample of the study. Midwives and nurses who were working and agreed to participate in the study were included in the study, while nurses who were working but did not agree to participate in the study were excluded from the study.

Data collection tools

The data were collected using a descriptive information form, the Fear of COVID-19 Scale (FCV-19S), and the Communication Skills Assessment Scale (CSAS).

Descriptive Information Form

This form was prepared by the researchers and includes a total of 12 questions about the participants' age, education level, marital status, income level, work experience, works schedule, job satisfaction and self-perception.

The Fear of COVID-19 Scale (FCV-19S)

The scale was developed by Ahorsu and friends 2020 to assess various aspects of pandemic fear (Ahorsu et al., 2020). This is one-dimensional, five-point Likert type scale (1=strongly disagree, 5=strongly agree) and consists of seven items. A high scale score indicates high fear of COVID-19. The Turkish reliability and validity study of the scale was conducted by Ladikli et al., who found the Cronbach's alpha as α =0.86 (Ladikli et al., 2020). In this study, Cronbach's alpha α =0.78 was found..

Communication Skills Assessment Scale (CSAS)

The scale measures how individuals perceive their communication skills. This is a five-point Likert type scale, scoring between 0-4 (0=never, 4=always) and consisting of 25 items (Korkut, 1996). A high scale score indicates perceived positive communication skills. The reliability and Cronbach' alpha coefficients of the scale were found as .76 and 0.80, respectively (Korkut, 1996). In this study, Cronbach's alpha α =0.98 was found.

Data Collection

The data were collected through face-to-face interviews in the gynecology and pediatric patient unit where midwives and nurses worked. The interview lasted around 10-15 minutes.

Data Analysis

The data were analyzed using the SPSS V.22. According to the kurtosis and skewness values, the data had normal distribution. The data were evaluated using descriptive statistics (number, percentage, mean, standard deviation), parametric tests (independent samples t test and ANOVA tests), and Pearson's correlation analysis. p value less than 0.05 was considered statistically significant.

Ethical Considerations

In order to conduct the study, institutional approval was obtained from the Ministry of Health COVID-19 Scientific Research Evaluation Commission (number: 2020-12-16T11_07_28), ethical approval from the X University Non-Interventional and Clinical Research Ethics Committee in 2021 (number: 2021/03-21) and institutional permission was obtained from the hospital where the study was conducted. In addition, written and verbal consent was obtained from the participants after they were informed about the study. The participants were informed that they could withdraw from the study at any time and that their information would be kept confidential.

Limitation of the Research

The study has some limitations. This is descriptive correlational single-centered study; therefore, its results cannot be generalized to the entire population. It is recommended to conduct further studies using a larger sample.

RESULTS

The mean age and work experience of the participants was 34.59±6.39 years and 11.39±6.67, respectively. They had similar mean age and work experience (p>0.05). Of them, 79.1% were married, 81.5% were undergraduates, 34.9% worked both day and night (mixed) shifts, 73.1% cared for 31 or more patients in a week, 51.4% were not satisfied with their working environment, 61.8% expressed their feelings sometimes easily and sometimes with difficulty, 80.3% sometimes had communication difficulties, 44.6% perceived themselves as sometimes assertive and sometimes shy, 41.0% reported that they mostly understood patients, and 68.7% received communication training (Table 1).

Surname and Surname Title

Table 1. Sociodemographic of The Midwives and Nurses in The Study (n=249)

Variables		Iidwives (n=101)	(n=	rses =149)	Tot (n=2	49)	p value
		ean ± SD		n ± SD	Mean		
Age (mean± SD)		.85±6.42		2±6.39	34.59=		0.601
Working time (mean± SD)		.41±6.97		8±6.48	11.39=		0.975
	n	%	n	%	n	%	
Marriage Status							
Married	76	38.6	121	61.4	197	79.1	0.140
Single	25	48.1	27	51.9	52	20.9	
Education							
Health vocational high School	23	50.0	23	50.0	46	18.5	0.101
Undergraduates	78	38.4	125	61.6	203	81.5	
Working Hours							
08-16 between hours	5	19.2	21	80.8	26	10.4	
16-08 between hours	29	46.8	33	53.2	62	24.9	0.110
Mixed	37	42.5	50	57.5	87	34.9	
08-08 hours	30	40.5	44	59.5	74	29.7	
Number of Patients Cared For							
1-30 between	48	71.6	19	28.4	67	26.9	0.001*
31 and above	53	29.1	129	70.1	182	73.1	
Satisfaction With The Working Enviror	ment						
Satisfaction	9	37.5	15	62.5	24	9.6	0.550
Not Satisfaction	50	39.1	78	60.9	128	51.4	0.773
Partly	42	43.3	55	56.7	97	39.0	
Expressing Emotions							
Ease	22	43.1	29	56.9	51	20.5	
Difficulty	19	43.2	25	56.8	44	17.7	0.807
Sometimes with ease, sometimes with							
difficulty	60	39.0	94	61.0	154	61.8	
Communication Difficulties							
Frequently	3	30.0	7	70.0	10	4.0	
Sometimes	81	40.5	119	59.5	200	80.3	0.737
Never	17	43.6	22	56.4	39	15.7	
Self-Perception							
Sociable	36	44.4	45	55.6	81	32.5	
Shy	20	35.1	37	64.9	57	22.9	0.545
Sometimes sociable sometimes shy	45	40.5	66	59.5	111	44.6	
Understanding Patients							
Usually Always	26	42.6	35	57.4	61	24.5	
Mostly	45	44.1	57	55.9	102	41.0	0.400
Sometimes	30	34.9	56	65.1	86	34.5	0.408
Getting Communication Training							
Yes	65	38.0	106	62.0	171	68.7	0.00
No	36	46.2	42	53.8	78	31.3	0.225

^{*}p<0.05; There is a statistically significant difference between the groups.

The participants' FCV-19S total mean score was 19.80±4.41. The FCV-19S total mean score was 75.83±22.11 for the midwives and 82.16±17.08 for the nurses, and the difference between them was statistically significant (p<0.016) (Table 2).

Table 2. FCV-19S and CSAS Comparison of Scale Score Means in Midwives and Nurses (n=249)

Scales	Midwives (n=101)	Nurses (n=148)	Total (n=249)	p value
	Mean ± SD	Mean ± SD	$Mean \pm SD$	
FCV-19S Total	19.64±4.77	19.90±4.16	19.80±4.41	0.647
CSAS Total	75.83±22.11	82.16±17.08	79.59±19.49	0.016*

COV_D-19; The Fear of COVID-19 Scale, **CSAS**; Communication Skills Assessment Scale, *p<0.05; There is a statistically significant difference between the groups.

A statistically significant weak negative relationship was found between the midwives' FCV-19S and CSAS mean scores (r: -0.196, p=0.049). Likewise, a statistically significant weak negative relationship was found between the nurses' FCV-19S and CSAS mean scores (r: -0.213, p=0.009). In other words, as the participants' fear of COVID-19 increased, their perceived communication with patients decreased (Table 3).

Table 3. CSAS and FCV-19S Relationship Between Scale Score Means in Midwives and Nurses (n=249)

Midwives	•	FCV-19S Total
CSAS Total	r	-196
	p	.049*
	n	101
Nurses		FCV-19S Total
CSAS Total	r	213
	p	.009*
	n	148

FCV-19S; The Fear of COVID-19 Scale, **CSAS**; Communication Skills Assessment Scale, *p<0.05; There is a statistically significant difference between the groups.

DISCUSSION

Communication is a crucial factor in patient care as it is accepted as the basis of relationship between patients, midwives and nurses. A poor communication negatively affects patient health and well-being, and poor communication skills can cause serious problems between healthcare professionals and patients. An effective communication with patients is an essential element in creating confidence and comfort in midwifery and nursing care practices (Erci et al., 2017; Karadağ et al., 2015; Şen et al., 2013). Because it affects midwifery and nursing processes, clinical reasoning and decision making. Positive communication between midwives and nurses and patients makes patients feel more valued and secure, helps identify patients' expectations and fears and provide care accordingly, enables patients to understand diagnosis and treatment recommendations, and encourages greater participation in the care process (Mullan & Kothe, 2010; Kirca & Bademli, 2019). Midwives and nurses' ability to communicate openly and clearly with healthy or sick individuals improves the quality of information exchange and patient care, reduces misunderstandings and errors in the care process, and helps prevent medical errors (Oluma & Abadiga, 2020; Ashagere et al., 2023). On the other hand, poor communication can have negative consequences for patients. A study has reported that poor communication skills can weaken patients' confidence in communicating and create negative feelings (Dong et al., 2016). Therefore, midwives and nurses' effective communication skills improve the quality of the care they provide (Kim and Sim, 2020).

The results of this study were discussed in line with the literature. As there is no similar study in the literature, this section was structured considering the results of studies on communication skills

and fear of COVID-19 in diverse groups. It was found that midwives and nurses had similar COVID-19 fear scale scores and that their communication skills decreased as their fear of COVID-19 increased.

In this study, the CSAS total score was 75.83±22.11 for the midwives and 82.16±17.08 for the nurses, and the difference between them was statistically significant. The nurses had higher CSAS mean scores than the midwives. The midwives' mean score was similar to those in the literature, whereas the nurses' mean score was higher than those in the literature (Erci et al., 2017; Kaya, 2013; Özlü et al. 2016). The nurses' CSAS mean score was found as 77.25±10.21 by Özlü et al. (Özlü et al., 2016) and 74.73±6.4 by Kaya (Kaya, 2013). Erci et al. reported that single midwives and nurses, those with bachelor's degree, and those aged between 18-23 years had higher communication skills, and that their communication skills were negatively affected by increased work experience and age (Erci et al., 2017). Similarly, Özlü et al. reported that nurses with a bachelor's degree had higher communication skills (Özlü et al., 2016). Another study reported that nurses with undergraduate and higher education had higher behavioral communication skills than those with other education levels (Kumcagiz et al., 2011). The majority of the midwives and nurses in this study had an undergraduate education (n=78). Education can remove barriers to communication skills (Özlü et al., 2016). Although the risk of infection and death is higher for healthcare professionals, the midwives and nurses in our study had high communication skills during the pandemic. This may be because the majority of them had undergraduate education. In addition, this study found higher CSAS mean score for nurses compared to midwives. This may be because the number of nurses with a bachelor's degree was higher than the number of midwives with a bachelor's degree.

There is a limited number of studies on the fear of COVID-19 in healthcare professionals. Following the emergence of the pandemic, the number of cases has increased rapidly, rising people's perceived fear, stress and anxiety (Rajkumar, 2020). The sensitivity of individuals to the virus has decreased as the information about the virus are updated, the precautions for healthcare professionals is increased, relevant guidelines are published, and the COVID-19 vaccines are administered (Dörttepe et al., 2021; Labrague et al., 2020). Our study found a moderate fear of COVID-19 in midwives (19.64±4.77) and nurses (19.90±4.16). The results of the present study are similar to those in the literature (Duman, 2020; Gencer, 2020; Kızıltepe & Yılmaz 2021; Labrague et al., 2020; Nürnberger et al., 2021; Taspinar et al., 2021; Wang, & Zhao, 2020; Yüncü, & Yılan, 2020). Midwives and nurses have higher levels of fear than the general population. This is because they have a higher risk of getting infection and infecting others than the general population, are exposed to heavy workload during the pandemic, and are directly involved in patient care. This study determined that midwives (19.64±4.77) and nurses (19.90±4.16) had similar levels of fear of COVID-19.

The high risk of transmission of COVID 19 can negatively affect the communication between midwives, nurses and patients, as it causes a severe course of disease and high mortality rates (Reznik et al., 2020). There is no study about the effect of patient communication on fear of COVID 19. The present study found a statistically significant weak negative relationship between the midwives' FCV-19S and CSAS mean scores (r: -0.196) and also between the nurses' FCV-19S and CSAS mean scores (r: -0.213). In other words, as the fear of COVID 19 in midwives and nurses increased, their perceived communication with patients was negatively affected. Taspinar et al. reported that the quality of life of physiotherapists who were afraid of COVID-19 adversely affected during the pandemic (Taspinar et al., 2021). Another study found that the pandemic had negative effects on the lives of healthcare workers (increased workload, changes in working conditions, negative effects on family life, increased burnout and negative attitudes of managers) (Yüncü & yılan, 2020). Arpacıoğlu et al. found that those living with their parents or families (spouse and children) had significantly higher levels of fear of COVID-19 than those living alone (Arpacioğlu et al., 2021). Our study determined that the fear of COVID 19 experienced by midwives affected their perceived communication with patients more negatively compared to nurses. Nurses in the hospital where the study was conducted mostly worked in the units where the patients had companions, staved in patient rooms for a shorter time and had shorter contact with the patients. Midwives in the hospital, on the other hand, mostly worked in the units where the patients had no companions, therefore they had to stay with the patients and meet all of their care and needs. Compared to the nurses, the midwives had to stay in close contact with the patients for a longer period of time. Therefore, contacting the patient constantly increased the risk of COVID-19 disease transmission for midwives. This may be the reason why midwives' perceived communication with patients was more negatively affected during the study period.

CONCLUSION

Midwives and nurses were moderately afraid of COVID-19, and this negatively affected their communication with patients. In addition, due to nurses' working conditions, their communication with patients was more negatively affected than that of midwives during the pandemic. It is recommended that the number of midwives and nurses in hospitals be increased during the pandemic, working hours be reduced, psychological support be provided, and working conditions be improved.

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Conflict of Interest

There is no conflict of interest regarding the research.

Author Contributions

Plan, design: $N\ddot{O}$, ST $SA\ddot{O}$, HA; Material, methods and data collection: $N\ddot{O}$, ST Data analysis and comments: $N\ddot{O}$, $SA\ddot{O}$, Writing and corrections: $N\ddot{O}$, ST $SA\ddot{O}$, HA

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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
- Arpacioğlu, S., Baltacı, Z., & Ünübol, B. (2021). Burnout, fear of Covid, depression, professional satisfaction levels and related factors in healthcare workers during the COVID-19 pandemic. Cukurova Medical Journal, 46(1), 88-100. DOI: 10.17826/cumj.785609
- Ashagere M, Yeheyis T, Addisu D, Abera W, Amlaku T, Tadesse F, et al. (2023). Caring behaviour and its associated factors among nurses working at public hospitals in Gamo Zone, Southern Ethiopia: A Cross-Sectional Study. Bmj Open, 13(10), E072183.
- Başol, E. (2018). Communication problems and solution suggestions between the patient and healthcare professionals (doctor and nurse). International Anatolia Academic Online Journal Social Sciences Journal, 4(1), 76-93. https://dergipark.org.tr/en/download/article-file/465271
- Buckley, C., Wee, S. L., & Qin, A. (2020). China's doctors, fighting the coronavirus, beg for masks. The New York Times. Erişim adresi: https://www.nytimes.com/2020/02/14/world/asia/china-coronavirus-doctors.html
- Çiftçioğlu, B. A., & Ordun, G. (2010). A research on measuring patients' satisfaction levels with physicians' communication with them. Öneri Dergisi, 9(34), 109-118. https://doi.org/10.14783/od.v9i34.1012000234
- Dong, S. T., Butow, P. N., Agar, M., Lovell, M. R., Boyle, F., & Stockler, M. (2016). Patients' experiences and perspectives of multiple concurrent symptoms in advanced cancer: A semi-structured interview study. Support Care Cancer, a; 24, 1373–1386. https://doi.org/10.1007/s00520-015-2913-4
- Dörttepe, Z. Ü., Hoşgör, H., & Sağcan, H. (2021). The effect of Covid-19 phobia on perceived stress: The sample of prehospital emergency care professionals. Journal of Academic Value Studies, 7(1), 31-40. Doi:10.29228/javs.49250
- Duman, N. (2020). Fear of COVID-19 and intolerance of uncertainty in university students. The Journal of Social Science, 4(8), 426-437. https://doi.org/10.30520/tjsosci.748404
- Erci, B., Çokbekler, N., & Işık, K. (2017). Evaluating the communication skills of midwives and nurses working in family health centers. Bozok Tıp Dergisi, 7(1), 49-53. https://dergipark.org.tr/tr/pub/bozoktip/issue/28590/305171#article_cite
- Gencer, N. (2020). Individuals' fear of coronavirus (Covid-19) during the pandemic period: Çorum example. International Journal of Social Sciences Academy, 4(4), 1153-1172. https://dergipark.org.tr/en/download/article-file/1278083
- Gritsenko, V., Skugarevsky, O., Konstantinov, V., Khamenka, N., Marinova, T., Reznik, A., & Isralowitz, R. (2021). COVID 19 fear, stress, anxiety, and substance use among russian and belarusian university students. International journal of mental health and addiction, 19(6), 2362–2368. https://doi.org/10.1007/s11469-020-00330-z
- Karadağ, M., Işık, O., Cankul, İ., Abuhanoğlu, H. (2015). Evaluation of communication skills of physicians and nurses. Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 17(1), 160-179. https://dergipark.org.tr/tr/download/article-file/287195

- Kaya, F., Özcan, A., & Yılmaz, M. (2013) Comparing communication and empathic ability levels of nurses with patients' perception of nursing care, Peak Journal of Public Health and Management, 1 (1), 1-8.
- Khalid, I., Khalid, T. J., Qabajah, M. R., Barnard, A. G., & Qushmaq, I. A. (2016). Healthcare workers emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. Clinical medicine & research, 14(1), 7–14. https://doi.org/10.3121/cmr.2016.1303
- Kızıltepe, S. K., & Yılmaz, Ş. (2021). Examining the relationship between nursing students' fear of coronavirus and care behaviors: A descriptive study. Turkiye Klinikleri J Nurs Sci, Doi: 10.5336/nurses.2021-84438.
- Kim, Y. A. & Sim, O. I. (2020). Communication skills, problem-solving ability, understanding of patients' conditions, and nurse's perception of professionalism among clinical nurses: A structural equation model analysis. International Journal of Environmental Research and Public Health, 17, 4896. https://doi.org/10.3390/ijerph17134896.
- Kirca N, Bademli K. (2019). Relationship between communication skills and care behaviors of nurses. Perspect Psychiatr Care, 55(4), 624-31.
- Kumcağiz, H., Yilmaz, M., Çelik, S. B., Avci, İ. A. (2011). Communication skills of nurses: An example from Samsun province. Dicle Tip Dergisi, 38(1), 49-56. https://doi.org/10.5798/diclemedj.0921.2012.04.0184
- Koçak, O., Koçak, Ö. E., & Younis, M. Z. (2021). The psychological consequences of COVID-19 fear and the moderator effects of individuals' underlying illness and witnessing infected friends and family. International journal of environmental research and public health, 18(4), 1836. https://doi.org/10.3390/ijerph18041836
- Korkut, F. (1996). Development of communication skills assessment scale: Reliability and validity studies. Turkish Psychological Counseling and Guidance Journal, 2(7), 18-23. https://doi.org/10.17066/pdrd.61225
- Mullan B. A, Kothe E. J.(2010). Evaluating a nursing communication skills training course: the relationships between self-rated ability, satisfaction, and actual performance. Nurse Educ Prac, 10 (6), 374-8.
- Labrague, L. J., & de Los Santos, J. A. A. (2021). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. Journal of nursing management, 29(3), 395–403. https://doi.org/10.1111/jonm.13168
- Ladikli, N., Bahadır, E., Yumuşak, F., Akkuzu, H., Karaman, G., & Türkkan, Z. (2020). Turkish reliability and validity study of the COVID-19 fear scale. Uluslararasi Sosyal Bilimler Dergisi, 3(2), 71-80.
- Nürnberger, P., von Lewinski, D., Rothenhäusler, H. B., Braun, C., Reinbacher, P., Kolesnik, E., & Baranyi, A. (2022). A biopsychosocial model of severe fear of COVID-19. PloS one, 17(2), e0264357. https://doi.org/10.1371/journal.pone.0264357
- Oluma A, Abadiga M. (2020). Caring behavior and associated factors among nurses working in jimma university specialized hospital, Oromia, Southwest Ethiopia, Bmc Nurs, 19(19).
- Özçalkap, N., Aydın Özkan, S., Taştan, S., Bucak, İ.H. (2022). Ebe ve hemşirelerde COVID-19 fobisinin hasta bakım davranışına etkisi. Anatolian J Health Res 2022; 3(2): 83-89. http://dx.doi.org/10.29228/anatoljhr.58503
- Özgünay, Ş. E., Akça, F., Karasu, D., Eminoğlu, S.,.,& Gamlı, M. (2021). Evaluation of the fear levels and prophylaxis practices experienced by anesthesiologists during the Coronavirus (COVID-19) Pandemic. JARSS, 29(1), 25-31. Doi: 10.5222/jarss.2021.40412
- Özlü, Z. K., Eskici, V., Gümüş, K., Yayla, A., Özlü, I., Aksoy, D., & Yeşilay, Y. (2016). Evaluating the communication skills and empathy levels of nurses working in emergency units. Uluslararası Hakemli Hemşirelik Araştırmaları Dergisi 8, 52-71.
- Rajkumar, R.P. (2020). COVID-19 and mental health: A review of the existing literature. Asian Journal of Psychiatry, 52, 102066. https://doi.org/10.1016/j.ajp.2020.102066
- Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2021). Adaptation of the fear of COVID-19 scale: Its Association with psychological distress and life satisfaction in turkey. International journal of mental health and addiction, 19(6), 1980–1988. https://doi.org/10.1007/s11469-020-00294-0
- Suwantarat, N., & Apisarnthanarak, A. (2015). Risks to healthcare workers with emerging diseases: Lessons from MERS-CoV, Ebola, SARS, and avian flu. Current opinion in infectious diseases, 28(4), 349–361. https://doi.org/10.1097/QCO.000000000000183
- Şen, H.T., Yılmaz, F.T., & Ünüvar. Ö.P. (2013). Communication skill levels of in-service training nurses. Psikiyatri Hemşireliği Dergisi, 4(1), 13-20. Doi: 10.5505/phd.2013.70188
- Reznik, A., Gritsenko, V., Konstantinov, V., Khamenka, N., & Isralowitz, R. (2021). COVID-19 fear in Eastern Europe: Validation of the fear of COVID-19 scale. International journal of mental health and addiction, 19(5), 1903–1908. https://doi.org/10.1007/s11469-020-00283-3
- Taspinar, B, Taspinar, F, Gulmez H., Kizilirmak, AS (2021). The relationship between fear of COVID-19 and quality of life in physiotherapists. Forbes J Med. 2(2): 108-115. doi: 10.5222/forbes.2021.54376
- Wang, C, Zhao, H (2020). The impact of COVID-19 on anxiety in chinese university students. Front Psychol, 11, 1168. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.01168/full
- World Health Organization, Coronavirus disease (Covid-19) outbreak: Rights, roles and responsibilities of health workers, including key considerations for occupational safety and health. Erişim adresi:

- $https://www.who.int/docs/default-source/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0$
- Wu, Z, McGoogan, JM (2020). Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) Outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention. JAMA. 323, 1239-1242. doi:10.1001/jama.2020.2648
- Yalçın, N, Aştı, T (2011). Nurse patient interaction. İstanbul Üniversitesi Florence Nightingale Hemşirelik Dergisi, 19(1), 54-59. https://dergipark.org.tr/tr/pub/fnjn/issue/9003/112185#article_cite
- Yüncü, V, Yılan, Y (2020). Examining the effects of the COVID-19 pandemic on healthcare workers: A situation analysis. Iğdır Üniversitesi Sosyal Bilimler Dergisi, 373-401. https://dergipark.org.tr/tr/download/article-file/2154583