Arastırma Makalesi/Research Article

The COVID-19 Pandemic Process Experiences of Nurses and Midwives: The Sample of Turkey

Nevin HOTUN SAHİN¹, Özlem ÇİFTÇİ², Merve TUNCER³, Merve KANIĞ⁴, Yeliz DOĞAN MERİH⁵, Mukaddes MİRAL⁶

Hemşire ve Ebelerin COVID-19 Pandemi Süreç Deneyimleri: Türkiye Örneği

Objectives: This study was conducted to determine the experiences of nurses and midwives in the pandemic period and their methods of coping with problems. Design: This research is a crossectional descriptive study. The research was conducted online with 224 nurses and midwives working during the COVID-19 pandemic between April and October 2020.

Methods: The SPSS software was used for data analysis to give simple percentages obtained from closed-ended questions. The open-ended questions were analysed by thematic analysis.

Conclusions: The majority of the participants (97.3%) were women, and 73.7% of them were nurses. It was found that 43.06% of the participants worked in pandemic units. It was determined that the most frequently encountered problem was the supply of protective equipment by 52.3%. The most frequently used method to cope with problems was working with lacking materials and equipment (46%). The themes that were obtained from the open-ended questions were identified as health institution management problems, emotional experiences and expectations and recommendations. In this study, the problems experienced by nurses and midwives, who are the most affected healthcare personnel from the COVID-19 pandemic process, their emotional problems, expectations and solution recommendations were listed. According to the nurses and midwives, receiving support from health institutions/hospital and nursing services management, supply of sufficient personal protective equipment and improvement of working hours, workload and work conditions carry create importance for employee and patient safety.

Majority of the participants (97.3%) were women and 73.7% were nurses.

Keywords: COVID-19, insufficient personal, insufficient protective equipment, Turkey,

Amaç: Bu araştırma hemşire ve ebelerin pandemi dönemindeki deneyimlerini ve sorunlarla baş etme yöntemlerini belirlemek amacıyla yapılmıştır.

Tasarım: Bu araştırma kesitsel tanımlayıcı bir çalışmadır. Araştırma, Nisan-Ekim 2020 tarihleri arasında COVID-19 pandemi sürecinde görev yapan 224 hemşire ve ebe ile çevirim içi olarak gerçekleştirilmiştir.

Yöntemler: Veri analizinde kapalı uçlu sorulardan elde edilen basit yüzdeleri vermek için SPSS yazılımı kullanıldı. Açık uçlu sorular tematik analiz yöntemi

Bulgular: Katılımcıların çoğunluğu (%97.3) kadın ve %73.7'si hemşiredir. Katılımcıların %43,06'sının pandemi birimlerinde çalıştığı ve en sık karşılaşılan sorunun %52,3 ile koruyucu ekipman temini olduğu belirlendi. Sorunlarla baş etmede en sık başvurulan yöntem eksik malzeme ve ekipmanla çalışmaktı (%46). Açık uçlu sorulardan elde edilen temalar sağlık kurumu yönetimi sorunları, duygusal deneyimler ve beklentiler ve öneriler olarak belirlenmiştir.

Sonue: Bu çalışmada COVID-19 pandemi sürecinden en çok etkilenen sağlık personeli olan hemşire ve ebelerin yaşadıkları sorunları, duygusal sorunları, beklentileri ve çözüm önerileri olarak sıralanmıştır. Hemşire ve ebelere göre sağlık kuruluşları/hastane ve hemşirelik hizmetleri yönetiminden destek alınması, yeterli kişisel koruyucu donanımın sağlanması ve çalışma saatlerinin, iş yükünün ve çalışma koşullarının iyileştirilmesi çalışan ve hasta güvenliği için önem arz

Anahtar kelimeler: Covid-19, Türkiye, yetersiz koruyucu ekipman, yetersiz personel

Date of receipt, 11.11.2022 Date of acceptance: 27.11.2022 Published Online: 30.11.2022

Attf/Citation: Hotun Sahin, N., Ciftci, O., Tuncer, M., Kanığ, M., Doğan Merih, Y.&Miral, M. (2022). The COVID-19 Pandemic process experiences of nurses and midwives: the sample of turkey. Kadın Sağlığı Hemşireliği Dergisi, 8 (3), 112-124.

² Corresponding author: Msc, Istanbul University -Cerrahpaşa Institute of Graduate Studies, Obstetric and Gynecologic Nursing, Phd Student, Istanbul /Turkey e-mail: ogr.uyesi.ozlem.ciftci@gmail.com ORCID ID 0000-0002-2378-3461

¹ Profesor Dr. Istanbul University-Cerrahpaşa, Florence Nightingale Faculty of Nursing, Istanbul /Turkey e-mail: nevinsahin34@yahoo.com ORCID ID 0000-0002-6845-2690

³ Asst.Prof, Istanbul University Faculty of Nursing Department of Women Health and Diseases Nursing/Turkey e-mail: mervecaglar90@hotmail.com ORCID ID 0000-0003-

<sup>2626-4170

4</sup> Phd, Acibadem Mehmet Ali Aydinlar University, Faculty of Health Sciences, Nursing Department Istanbul /Turkey e-mail: mervecskn20208@gmail.com ORCID ID 0000-0003-

⁵ Assoc. Prof, Health Sciences University, Faculty of Hamidiye Nursing Departmant of Obstetrics Gynecology Nursing, Istanbul Turkey e-mail: yelizmrh@gmail.com ORCID ID 0000-0002-6112-0642

⁶Asst.Prof, İstanbul Kültür Üniversitesi, Sağlık Bilimleri Fakültesi, İstanbul.e-mail: mukaddesmiral@gmail.com ORCID ID 0000-0002-0696-8923

GENIŞLETILMIŞ ÖZET

Yeni koronavirüs hastalığı 2019 (COVID-19), SARS-CoV-2 olarak bilinen virüsün neden olduğu viral bir şiddetli akut solunum sendromudur. COVID-19 ilk olarak 2019 yılının sonunda Çin'in Wuhan şehrinde tanımlanmış ve birkaç ay içinde tüm dünyaya hızla yayılmıştır (Munster, Koopmans, van Doremalen, van Riel, & de Wit, 2020; Wang ve diğerleri, 2020). Mart 2020'de Dünya Sağlık Örgütü (WHO) hastalığı küresel bir salgın olarak ilan etmiştir. Koronavirüs pandemisi kısa sürede tüm dünyayı etkisi altına almış, birçok ölüme ve yaşam tarzı değişikliğine yol açmıştır (Velavan ve Meyer, 2020; Wang ve ark., 2020; Bedford ve ark., 2020).

COVID-19 hızlı yayılımı, enfeksiyon gücü, ağır vakalarda ölümcül seyri ve spesifik bir ilacının olmaması nedeniyle insan hayatı ve sağlığı için büyük tehdit oluşturmaktadır. Hastalık, bireylerin ruh sağlığını da etkilemekte ve duygusal sorunlar yaşamalarına neden olmaktadır (Gao ve ark., 2020).

T.C. Sağlık Bakanlığı verilerine göre toplam vaka sayısı 17.005.537, toplam ölü sayısı 101.400 toplam iyileşen hasta sayısı ise 13.856.981 olarak belirlenmistir.

(https://COVID19.saglik.gov.tr/TR-66935/genelkoronavirus-tablosu.html; Erisim Tarihi: 21.11.2022). Ancak COVID-19 teşhisi konan ve hastalık nedeniyle hayatını kaybeden sağlık çalışanlarının sayısı hakkında kesin bir bilgi bulunmamaktadır. Pandemiler sırasında hemsireler her zaman erken teşhis, triyaj ve sağlığın iyileştirilmesinin korunması ve merkezinde olmuş, benzer şekilde, COVID-19 pandemi sürecinde de önemli katkılar sağlamaya devam etmektedirler (Turale ve diğerleri, 2020; Fong ve diğerleri, 2020). Bu nedenledir ki DSÖ tarafından 2020 yılının "Hemşire ve Ebe Yılı" ilan edilmesi çok isabetli olmuştur. 2020 yılı, hemşirelerin ve diğer sağlık çalışanlarının cesur çalışmalarıyla tarihe bir gurur sayfası olarak geçecektir. Tarih, Uluslararası Hemşire ve Ebe Yılı 2020'yi ve Florence Nightingale'in 200. gününü hemşirelerin doğum sağlık için bir olarak vazgeçilmezliğinin belgesi kaydedecektir

(https://2020yearofthenurse.org/Nurse).

Hemşireler enfeksiyon riskinin artmasını sıklıkla seçtikleri mesleğin bir parçası olarak kabul etseler de enfeksiyon yönetimi ve izolasyon önlemlerinin hayati önem kazandığı bu süreçte bazı sorunlarla karşılaşmaktadırlar (Adams ve Walls, 2020). Pandeminin oldukça yoğun yaşandığı ülkelerde,

fiziksel ve zihinsel yorgunluk, enfeksiyon riski ve yeterli malzeme ve ekipman eksikliğinin yanı sıra sağlık personeli de zor triyaj kararları vermek zorunda kalmış ve sağlıklarını kaybetmenin acısını derinden hissetmişlerdir (Lancet, 2020).

Amaç:

Bu çalışmanın amacı kadın sağlığı alanında hizmet veren hemşire ve ebelerin COVID-19 pandemi sürecinde yaşadıkları sorunlarla baş etme deneyimlerini ve yöntemlerini belirlemektir.

Yöntemler:

Bu araştırma kesitsel tanımlayıcı çalışmadır. Araştırma Nisan-Ekim 2020 tarihleri arasında COVID-19 pandemi sürecinde görev yapan 224 hemşire ve ebe ile yapılmıştır. Veriler, açık ve kapalı uçlu soruların bir arada bulunduğu 31 maddelik anket formu ile toplanmıstır. Anket katılımcıların COvid-19 formu sürecindeki demografik bilgileri, sağlık hizmetleri ile ilgili yaşadıkları sorunları ve duygusal zorlukları içermekte olup araştırmacılar tarafından literatür taranarak geliştirilmiştir (Jiatong ve diğerleri, 2020: RCOG. 2020: https://COVID19.saglik.gov.tr/.).

yöntemle Araştırmanın verileri çevrimiçi toplanmıştır. Anket formu Google Forms platformuna yüklenerek Kadın Sağlığı Hemşireleri Derneği'nin e-posta ve sosyal medya uygulamalarında (Facebook, WhatsApp ve Instagram) duyurulmuş ve anketin Türkiye'nin farklı illerinde birçok farklı hastane aracılığıyla duyurulması sağlanmıştır.

Kapalı uçlu sorulardan elde edilen yüzde oranlarını vermek için veri analizinde SPSS (Windows 15.0) yazılımı kullanılmıştır. Açık uçlu sorular tematik analiz ile analiz edilmiştir.

Etik kurul onayı Bilecik Şeyh Edebali Üniversitesi Non-İnvaziv Klinik Etik Kurulu'ndan 21.10.2020 tarihli kararı ile (protokol no: 54674167-050.01.04) alınmıştır. Anketi yanıtlamaya başlamadan önce, katılımcıların onamları alınmış, çalışma Helsinki Deklarasyonuna uygun olarak yapılmıştır.

Bulgular:

Katılımcıların çoğunluğunu (%97,3) kadın, %73,7'sini hemşireler oluşturmuştur. Katılımcıların yaş ortalaması 35.00±1.51 yıl idi. Hastanelerde COVID-19 sürecinde yaşanan sorunlar incelendiğinde en sık karşılaşılan sorunların %52,3 ile koruyucu ekipman temininde, %42,2 ile teknik hizmetlerde ve %36,4

ile COVID-19 hizmetlerine ilişkin süreçlerde olduğu belirlenmiştir. Bu sorunlarla çözüm olarak en sık başvurulan yönteminin ise eksik malzeme ve ekipmanla çalışmak olduğu tespit edilmiştir.

Sonuç ve Öneriler

Bu çalışmada COVID-19 pandemi sürecinden en çok etkilenen sağlık personeli olan hemşire ve ebelerin yaşadıkları sorunlar, duygusal sorunları, beklentileri ve çözüm önerileri olarak sıralanmıştır. Hemşire ve ebelere göre sağlık kurulusları/hastane bakım hizmetleri ve vönetiminden destek alınması, yeterli kişisel koruyucu donanımın sağlanması ve çalışma saatlerinin, iş yükünün ve çalışma koşullarının iyileştirilmesi çalışan ve hasta güvenliği için önem arz etmektedir.

INTRODUCTION

The novel coronavirus disease 2019 (COVID-19) is a viral severe acute respiratory syndrome caused by the virus known as SARS-CoV-2. It was first identified in the city of Wuhan in China at the end of 2019 (Munster, Koopmans, van Doremalen, van Riel, & de Wit, 2020). In a few months, COVID-19 had spread to the entire world fast (Wang et al., 2020). In March 2020, the World Health Organisation (WHO) declared the disease as a global pandemic. The coronavirus pandemic took the entire world under its effect in a short time and led to many deaths and lifestyle changes (Velavan & Meyer, 2020; Wang et al., 2020; Bedford et al., 2020). The disease usually progresses mildly in the case that it is not combined with other comorbidities or previously existing diseases (Iorio-Morin et al., 2020). In general, two ways of COVID-19 infection as direct and indirect were defined (WHO, 2020). COVID-19 poses a great threat for human life and health due to its rapid spread, power of infection, deadly course in severe cases and the fact that it does not have a specific medication. The disease also affects the mental health of individuals and leads them to experience emotional problems (Gao et al., 2020).

According to the data of the Turkish Ministry of Health, the total number of cases was determined as 17.005.537, the total number of mortalities was determined as 101.400, and the total number of recovered patients was determined as 13.856.981 until the date of 21 November 2022 (https://COVID19.saglik.gov.tr/TR-66935/genel-koronavirus-tablosu.html). However, there is no precise information on the number of healthcare

workers diagnosed with COVID-19 and died due to the disease.

During pandemics, nurses have always been at the centre of early diagnosis, triage and protection and improvement of health. Similarly, there are also continuing to provide significant contributions during the COVID-19 pandemic process (Turale et al., 2020; Fong et al., 2020). Declaration of the year 2020 by WHO as the "Year of the Nurse and the Midwife" has been very accurate. The year 2020 will go down in history as a page of pride with the brave work of nurses and other healthcare workers. History will record the International Year of the Nurse and the Midwife 2020 and the 200th birthday of Florence Nightingale as a document of the indispensability of nurses for health (https://2020yearofthenurse.org/Nurse).

Although nurses frequently accept the increased risk of infection as a part of the profession that have chosen, they encounter some problems in this process where infection management and isolation precautions have gained vital importance (Adams & Walls, 2020). In countries where the pandemic has been experienced highly intensely, in addition to physical and mental fatigue, infection risk and lack of sufficient material and equipment, healthcare personnel have also had to make difficult triage decisions, and they have deeply felt the pain of losing their patients and colleagues in addition to these (Lancet, 2020).

The purpose of this study is to determine the experiences and methods of coping with problems of nurses and midwives who provide services in the field of women's health in the COVID-19 pandemic process.

MATERIALS AND METHODS

Design and Data Collection

This was a crossectional descriptive study. It was conducted with 224 nurses and midwives who were on duty in the COVID-19 pandemic process between April and October 2020. The data were collected with a 31-item questionnaire form that combined open- and closed-ended questions. The questionnaire form including demographic information, health services problems emotional challenges in COVID-19 developed by the researchers through the guidance of the literature (Jiatong et al., 2020; RCOG, 2020) and the Turkish Ministry of Health COVID-19 website (https://COVID19.saglik.gov.tr/.).

The data of the study were collected with the online method. The questionnaire form was

uploaded onto the Google Forms platform and advertised on e-mails and social media applications of the Women's Health Nursing Association (Facebook, WhatsApp and Instagram). We ensured that the questionnaire was advertised through many different hospitals in different cities in Turkey.

Data Analysis

The SPSS (Windows 15.0) software was used for data analysis to give percentages obtained from closed-ended questions. The open-ended questions were analysed by thematic analysis. Thematic analysis is used to analyse openedended data to identify and generate patterns from within these data (called themes). This involved becoming familiar with the data set, creating initial codes (attaching labels to different sections of the text), generating themes based on the respective codes (by grouping different codes together) and applying this to the context of the research question.

Ethical Approval

Ethics committee approval was obtained from the Non-Invasive Clinic Ethics Committee of Bilecik Şeyh Edebali University (21.10.2020, protocol no: 54674167-050.01.04). Before they started answering the questionnaire, the consent of the participants was obtained. The study was conducted in accordance with the Declaration of Helsinki.

RESULTS

In total, 224 nurses and midwives responded to and completed the questionnaire. The majority of the participants (97.3%) were women, and 73.7% of them were nurses. The mean age of the participants was 35.00±1.51 years. The other demographic data are presented in Table 1.

The data of the nurses and midwives about the COVID-19 pandemic process are shown in Table 2. It was found that 43.06% of the participants worked in pandemic units (31.5% COVID-19 clinics, 4.46% contact tracing team, 7.1% COVID-19 intensive care unit), and 6.8% of them were diagnosed with COVID-19. When the

problems experienced during COVID-19 at the hospitals were examined, it was determined that the most frequently seen problems were in the supply of protective equipment by 52.3%, technical services by 42.2% and processes related to COVID-19 services by 36.4%. The most frequently used coping method to cope with these problems was working with lacking materials and equipment (46%) (Table 2).

The identified themes for the open-ended questions were grouped as the hospital and nursing management services (Figure 1).

Table 1: Demographic Data Of The Participants (n=224)

Demograph	ics	n	%
Age (X±SD) (35.0±1.5)	21-25	56	25.0
	26-34	55	24.6
	35-49	79	35.3
	50-56	34	15.1
Gender	Female	198	97.3
Gender	Male	6	2.7
Education	High School	8	3.6
	University	150	67.0
	Master	59	26.3
	PhD	7	3.1
Profession	Midwife	59	26.3
	Nurse	165	73.7
	Provincial	6	2.7
	Health		
	Directorate		
	Family Health	28	12.5
Workplac	Center		
e e	University	47	21.0
C	Hospital		
	Research And	78	34.8
	Training		
	Hospital		
	State Hospital	65	29.0

Table 2: Participants' Data on the COVID-19 Process

Variables		n	%
	COVID-19 Clinic	67	30.0
Workplace During COVID-19	COVID-19 Intensive Care Unit	16	7.1
	Fillation Team	10	4.5
	Other Units	131	58.4
	3-30 day	21	9.4
Working Time in COVID- 19 Services (Clinic, Intensive Care Unit and Fillation Team)	31-60 day	32	14.3
	61-90 day	32	14.3
	91 day and more	8	3.6
	Other Units	131	58,4
	Yes	15	6.8
Getting a Diagnosis of	No	191	93.2
COVID 19		-/-	,
Duration of Hospitalization	3-5 day	6	2.94
Due to COVID-19	5 day and more	9	4.01
	Hospital Management Problems	37	31.9
	Nursing Management Problems	40	19.2
Problems in the COVID-19	COVID-19 Services Management Problems	78	36.4
Process *	Patient Hospitalization Problems	55	26.8
	Technical Services (device, equipment, etc.)	89	42.2
	Purchasing Processes (mask, gloves, etc.)	113	52.3
	Cleaning Services Problems	75	34.7
	Working More Hours	90	44.6
Methods for Solving	Working with Lacking Materials and	93	46.0
Problems in the COVID-19	Equipment		
Process	Mandatory Assignment to COVID-19 services	52	28.1
110000	Staying Away from the Family / Living Apart	35	16.8

In this study, the emotional problems the participants experienced and what participants learned during the COVID-19 process were also determined (Figure 2).

Recommendations were offered by the nurses and midwives for better nursing care quality (Figure 3).

Figure 1: Chart To Show The Most Common Problems About Hospital And Nursing Management

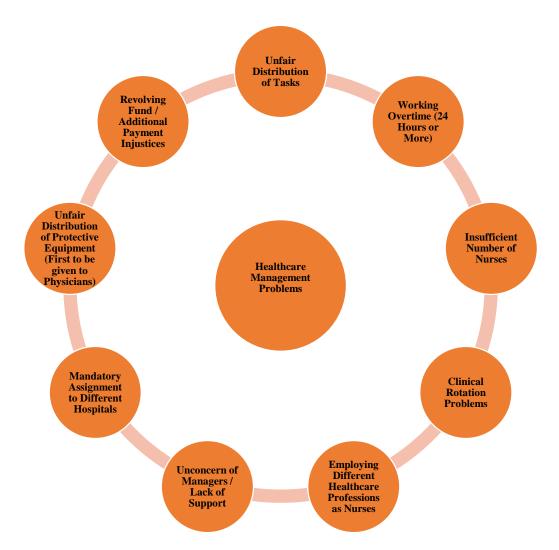


Figure 2: Chart to Show The Most Common Emotions Experienced During COVID-19 Process

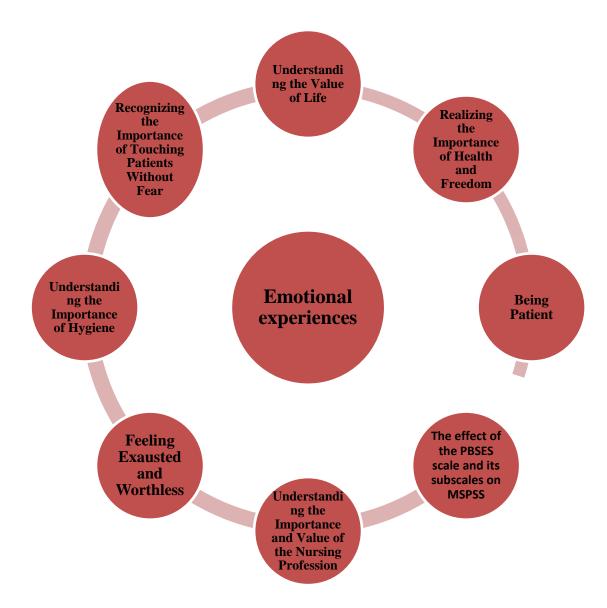
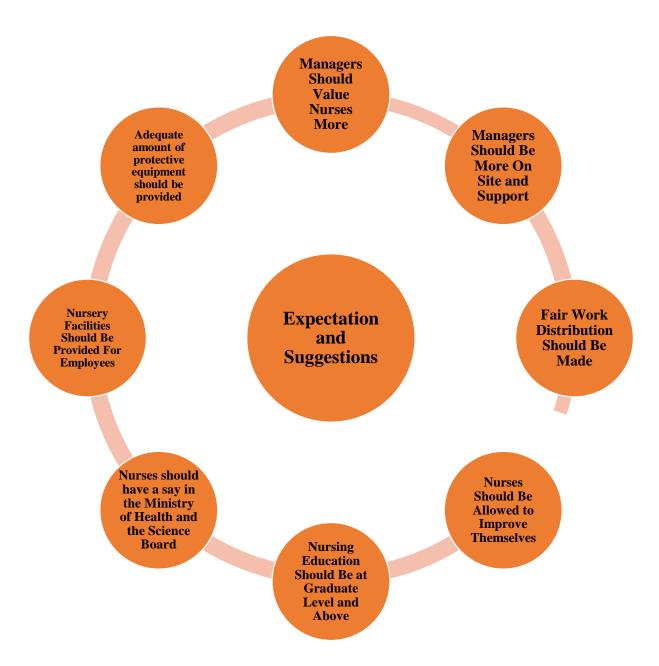


Figure 3: Chart to show The Most Common Suggestions For Better Nursing Care Quality



DISCUSSION

Due to the COVID-19 pandemic, healthcare workers in the entire world are showing an unprecedented fight. The International Council of Nurses (ICN) emphasised that nurses have taken on a key role in epidemic diseases and natural disasters all around the world (https://www.2020yearofthenurse.org/; Date accessed: 21.11.2020). Nurses take on duties such as preventing the spread of the COVID-19 pandemic, achieving the care, monitoring and treatment of these patients, achieving infection control and supporting palliative patients and their relatives. While practicing these duties, they not only try to protect themselves and their

families but also struggle with their own problems such as housing, transportation and child/elderly care. As in the entire world, nurses in Turkey also work with long and excessive working hours, insufficient numbers of healthcare personnel and intense workload due to the coronavirus pandemic. Due to administrative problems at some health institutions and with the psychological effects of fatigue and burnout, they not only show a struggle for life but also experience ethical and moral dilemmas (WHO,2020; AHA, 2020; ANA, 2020).

In the pandemic process, many problems are encountered in provision of health services. According to the result of a survey study which included more than

32,000 nurses in the frontlines of the coronavirus (COVID-19) pandemic process around the United States conducted by the American Nurses Association (ANA), the nurses stated that they had serious concerns about lack of protective equipment, personnel and access to training (ANA, 2020). In a study carried out in Nigeria, most healthcare workers (61%) stated that they were under risk of virus infection at the institution where they worked (Ogolodom et al., 2020).

Healthcare Management Problems

In the pandemic process, where health services management has gained significance in the entire world, it is highly important for health institutions to ensure the application of guidelines and directives published by the CDC (https://www.cdc.gov/coronavirus/2019-

ncov/infection-control/control-

recommendations.html; Date Accessed: 21.11.2020). However, this is not always possible. In a study in Nigeria, 62% of healthcare workers reported that their workplace safety was insufficient due to COVID-19. In the study by Ogolodom et al., the vast majority of the participants (78%) emphasised that the lack of a social insurance policy for healthcare workers especially in this pandemic period was an obstacle to effective provision of services, whereas 89% believed that the infection control policy of their hospital was not adequate. In the same study, half of the participants stated that there were no sufficient inspection policies by the government, while it was also specified that adequate testing and contact tracing were not available (77.33%) (Ogolodom et al., 2020). In our study, it was determined that the participants experienced problems in purchasing (52.3%), technical support services (42.2%), unit operations (36.4%), cleaning services (34.7%), process about the upper management (31.9%), patient hospitalisation procedures (26.8%) and processes about nursing management (19.2%). The Healthcare Management Problems specified by the participants are shown in Figure 1. The problems experienced in the pandemic process were in parallel with those reported in similar studies (Turale et al., 2020; WHO, 2020; AHA, 2020; ANA, 2020; Karasu & Copur, 2020; Ogolodom et al., 2020).

In many countries, nurses work under the physical and psychological pressure of this pandemic due to lack of sufficient resources or personal protective equipment, excessive numbers of patients, lack of personnel, unprepared health systems and disruptions in the supply chain of materials/equipment (Turale et al., 2020; WHO, 2020; AHA, 2020; ANA, 2020; Karasu & Çopur, 2020). Lack of sufficient personal protective equipment is one of the most significant problems experienced by healthcare workers worldwide (ANA, 2020). However, employers are tasked with providing sufficient personal protective equipment for their

employees (Morley et al., 2020). In our study, similarly, it was observed that the nurses had difficulty in accessing protective equipment (52.3%), there were injustices in the distribution of protective equipment, and priority was given to doctors while distributing equipment. Insufficiency of protective equipment and their inappropriate use in terms of infection control rules specified for the coronavirus pandemic will lead the virus to infect healthcare workers, and therefore, interrupt the healthcare system.

In the case that adequate personal protective equipment is provided, and the necessary training is given, nurses and midwives will be protected from health risks, and patient care quality will increase (Morley et al., 2020). Huang et al. (2020) reported that they provided isolation and infection control training for nurses at an emergency hospital in a province in China, but in the follow ups they conducted with observer nurses and camera recordings, they observed that some nurses occasionally made mistakes in putting on and taking off personal protective equipment. Therefore, in the coronavirus pandemic that threatens the safety of healthcare workers, the supply of personal protective equipment, their just distribution and the correct use and removal of this equipment by healthcare workers should be ensured.

Unfortunately, according to the report published by the CDC, the coronavirus tests of 216,691 healthcare workers came out positive in the United States, while 800 healthcare personnel lost their lives due to the coronavirus (CDC, 2020; https://COVID.cdc.gov/COVID-data-tracker/#healthcare-personnel: Date Accessed: Additionally, according to the report by the ICN (International Council of Nurses) published on 28 October 2020, it was confirmed that 1500 nurses in 44 died of COVID-19, and it was estimated that the deaths of healthcare workers may be as much as more than worldwide in the pandemic (https://www.icn.ch/sites/default/files/inline-

files/PR_52_1500% 20Nurse% 20Deaths_FINAL-3.pdf; Date Accessed: 21.11.2020). In our study, it was determined that 6.8% of the participants were diagnosed with COVID-19 in the pandemic process. Ensuring that health institutions apply the guidelines and directives of the Centers for Disease Control and Prevention (CDC) will be useful in protecting healthcare workers and their families (https://www.cdc.gov/coronavirus/2019-

ncov/infection-control/controlrecommendations.html; Date Accessed: 21.11.2020). For the wellbeing of healthcare workers and protection of public health, it is important for governments to invest in the health system, take preventive precautions to prevent the spread of COVID-19 infection and issue the necessary restrictions.

Emotional Experiences in the COVID-19 Process

As in the case of previously experienced epidemics, also in the COVID-19 pandemic, facing an unknown contagious disease leads healthcare workers to not be able to effectively cope with the crisis, lose their emotional control and become anxious (Pan et al., 2020). While nurses are fighting against epidemic diseases, they are also exposed to the pressure applied on the health systems of countries by the epidemic disease (Labrague & De los Santos, 2020; Lai et al., 2020; Turale et al., 2020). Nurses encounter psychological problems as a result of the negativities in their working environment (Labrague & De los Santos, 2020; Lai et al., 2020; Turale et al., 2020; Karasu & Copur, 2020; Shen et al., 2020). Due to reasons like intense working hours and workloads, lack of personnel, being stationed at different units than their own, not being able to breathe inside protective equipment, fears that the virus will be transmitted to themselves and their families and being isolated from family and social environment, nurses experience problems such as stress, anxiety, depression and burnout in the pandemic process (Shen et al., 2020; Karasu & Copur, 2020). The emotional problems stated to be experienced in the pandemic process in our study were similar to those reported in the literature (Labrague & De los Santos, 2020; Lai et al., 2020; Turale et al., 2020; Karasu & Çopur, 2020; Shen et al., 2020).

In studies, it has been concluded that nurses did not drink water or go to the toilet to achieve savings from isolation outfits during their duties (Mo et al., 2020; Huang et al., 2020; Karasu & Copur, 2020). In a metaanalysis study examining the anxiety statuses of Chinese healthcare workers during the COVID-19 pandemic process, it was concluded that the anxiety scores of healthcare workers were significantly higher than the national norm in every included study (Pan et al., 2020). Ersoy et al. (2020) reported that the status of nurses feeling socially, physically and psychologically well was negatively affected after the COVID-19 pandemic. In the COVID-19 pandemic, nurses are under both physiological and psychological pressure, and they constantly experience stress and fatigue (Huang et al., 2020). This chronic stress causes nurses to experience burnout and mental problems.

Zerbini et al.'s study showed that not every healthcare worker was equally affected by the COVID-19 pandemic. It was found that especially nurses working at COVID-19 services were psychologically negatively affected by the outcomes of the pandemic. In the same study, in comparison to their colleagues working at normal services, these nurses generally reported higher stress perceptions in addition to higher fatigue, depressive symptoms and lower job satisfaction

(Zerbini et al., 2020). In similarity to previous studies, the participants in our study, most of whom were working at pandemic units, contact tracing and intensive care units, stated that they experienced feelings of burnout and valuelessness in the pandemic process (Figure 2). Hospital administrations and manager nurses should organise activities that will increase the morale and motivations of nurses and midwives. Healthcare workers need to be supported in feeling better by organising psychological support services, peer counselling, stress-coping activities, meditation, yoga and mindfulness activities.

Expectations and Suggestions

It is inevitable to make some arrangements in health systems to sustain and improve the health and productivity of nurses and midwives working in different conditions in the frontlines worldwide during the COVID-19 pandemic process. Studies conducted on the expectations of healthcare workers in the pandemic process are limited. In the study by Shanafelt et al. conducted with 69 healthcare workers including nurses, the expectations of the participants were categorised as "hear me", "protect me", "prepare me", "support me" and "attend to me". In our study, too, it was observed that the participants had similar expectations to those in their study (Figure 3) (Shanafelt et al., 2020).

Studies have reported that, as the knowledge levels of nurses increase in the pandemic process, their anxiety and concern levels decrease. It has become prominent in studies that promoting/improving nursing education and providing nurses with training on epidemic diseases, natural disasters and ethics are important in the fight against the pandemic. Labrague and De los Santos (2020) emphasised the vital role of hospital and nursing administrators in supporting nurses during the pandemic process with evidence-based education, training or interventions and policies. In our study, the solution recommendations of the participants also supported those reported in previous studies (Figure 3). Standardising up-to-date evidence-based and guidelines that nurses and midwives will use in the care, monitoring and treatment of COVID-19 patients and making these guidelines prevalent at health institutions are additionally important in terms of patient safety. The Women's Health Nursing Association (Turkey) published a special bulletin titled "COVID-19 Management in Pregnancy and the Postpartum Period" in the pandemic process. It contributed to awareness by sharing current visual messages informing colleagues over social media accounts. The ICN recommends health systems and policymakers to utilise the expertise of nurse leaders support them (https://www.icn.ch/sites/default/files/inlinefiles/PR_52_1500%20Nurse%20Deaths_FINAL-3.pdf; Date Accessed: 21.11.2020). High-level representation of nurses and them having a say in the Scientific Advisory Board (for COVID-19) are among the solution recommendations of the participants. These activities are also important in terms of the visibility of the profession and patient/employee safety.

CONCLUSION

Consequently, in the COVID-19 pandemic process, nurses and midwives experience various difficulties in provision of healthcare services. Despite these biopsychosocial difficulties, they continue their duties uninterruptedly and with dedication. Very important duties fall upon governments, public and private institutions providing healthcare services professional associations for protecting the health and wellbeing of healthcare workers and maintaining the continuance of their service. It is greatly important in terms of employee and patient safety for health institutions, hospital management and nursing management to improve the conditions of personal protective equipment provision, working hours and workload.

Ethics Committee Approval: Ethics committee approval was obtained from the Non-Invasive Clinic Ethics Committee of Bilecik Şeyh Edebali University (21.10.2020, protocol no: 54674167-050.01.04). Before they started answering the questionnaire, the consent of the participants was obtained. The study was conducted in accordance with the Declaration of Helsinki.

Peer-review: External referee evaluation

Author Contributions: Idea/Concept: N.H.Ş.;Design: N.H.Ş.;Supervision/Counsulting: N.H.Ş.;Data Collection and/or Processing: Y.D.M.,M.K., N.H.Ş,Ö.Ç.,M.T.;Analysis and/or Interpretation: N.H.Ş., M.K.,Ö.Ç.,M.T.;Literature Review: N.H.Ş., Ö.Ç.;Writing:N.H.Ş.,M.K.,M.T.;Critical Review: N.H.Ş.,M.K.,M.M.,Ö.Ç.,M.T.;Y.D.M.;Funding: N.H.Ş.

Conflict of interest: Researchers have not declared any conflict of interest.

Financial Disclosure: No financial support has been received for this research.

REFERENCES

- Adams, J. G., & Walls, R. M. (2020). Supporting the health care workforce during the COVID-19 global epidemic. The Journal of the American Medical Association, 323(15), 1439-1440.
- American Hospital Association. (2020). Hospital and health systems face unprecedented financial pressures due to COVID-
 - 19. https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due; Access Date: 12.11.2020
- American Nurse Association (ANA). (2020). Survey: Nurses fear going to work due to lack of protection from virus more than 32k nurses share experience from the front lines. https://www.nursingworld.org/news/news-releases/2020/survey-nurses-fear-going-to-work-due-to-lack-of-protection-from-virus-more-than-32k-nurses-share-experience-from-the-front-lines/; Access Date: 12.11.2020.
- Bedford, J., Enria, D., Giesecke, J., Heymann, D.L, Ihekweazu, C., Kobinger, G., et al (2020). COVID-19: towards controlling of a pandemic. Lancet, 395(10229):1015–8. https://doi.org/10.1016/S0140-6736(20)30673-5.
- Cai, J., Sun, W., Huang, J., Gamber, M., Wu, J., He, G. (2020). Indirect virus transmission in cluster of COVID-19 cases, Wenzhou, China, 2020. Emerging Infectious Diseases Journal, 26(6):1343–5. https://doi.org/10.3201/eid2606.200412.
- Centers for Disease Control and Prevention. Interim infection prevention and control recommendations for patients with confirmed coronavirus disease 2019 (COVID-19) or persons under investigation for COVID-19 in healthcare settings (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html; Access Date: 21.11.2020).
- De Melo, G. C. , & de Araújo, K. C. G. M. (2020). COVID-19 infection in pregnant women, preterm delivery, birth weight, and vertical transmission: A systematic review and meta-analysis. Cadernos de Saude Publica, 36(7). https://doi.org/10.1590/0102-311X00087320
- Ersoy, S., Koç, Ş. Ö., & Ersoy, İ. H. (2020). COVID-19'lu hastalara tedavi ve bakım veren sağlık çalışanlarının görüşlerinin belirlenmesi. Electronic Turkish Studies, 15(6).
- Fong, R., Tsai, K. C. F., Tong, M. C. F., & Lee, K. Y. S. (2020). Management of Dysphagia in Nursing Homes During the COVID-19 Pandemic: Strategies and Experiences. SN Comprehensive Clinical Medicine, 2(9), 1361. https://doi.org/10.1007/s42399-020-00464-0
- Gao, J.L., Zheng, P.P, Jia, Y.N., et al. (2020). Mental Health Problems and Social Media Exposure During COVID-19 Outbreak. 15(4): e0231924.

- Huang, L. H., Chen, C. M., Chen, S. F., & Wang, H. H. (2020). Roles of nurses and National Nurses Associations in combating COVID-19: Taiwan experience. International Nursing Review, 67(3), 318–322. https://doi.org/10.1111/inr.12609
- Huang, L., Lei, W., Liu, H., Yu, L., & Xu, F. (2020). Emotional responses and coping strategies in nurses and nursing students during COVID-19 outbreak: A comparative study. PLoS ONE, 15 (8 August). https://doi.org/10.1371/journal.pone.0237303
- Huang, L., Lin, G., Tang, L., Yu, L., & Zhou, Z. (2020). Special attention to nurses' protection during the COVID-19 epidemic.
- Iorio-Morin, C., Hodaie, M., Sarica, C., Dea, N., Westwick, H.J., Christie, S.D, et al. (2020). Letter: the risk of COVID-19 infection during neurosurgical procedures: a review of severe acute respiratory distress syndrome coronavirus 2 (SARS-CoV-2) modes of transmission and proposed neurosurgery-specific measures for mitigation. Neurosurgery. https://doi.org/10.1093/neuros/nyaa157.
- Karasu, F. (2020. Koronavirus (COVID-19) vakaları artarken salgının ön safındaki bir yoğun bakım hemşiresi: "Cephede duran kahramanlar". Yoğun Bakım Hemşireliği Dergisi, 24(1), 11-14.
- Labrague, L. J., & De los Santos, J. (2020). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. Journal of nursing management. 29(3), 395-403. doi: 10.1111/jonm.13168.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., ... & Tan, H. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Network Open, *3*(3), e203976-e203976.
- Lehmann, M., Bruenahl, CA., Lo"we, B., Addo, M.M., Schmiedel, S., Lohse, A.W., et al. (2015). Ebola and psychological stress of health care professionals. Emerging Infectious Diseases Journal, 21: 913–914. https://doi.org/10.3201/ eid2105.141988 PMID: 25897490
- Lin, C.Y, Peng, Y.C., Wu, Y.H., Chang, J., Chan, CH., Yang, D.Y. (2007). The psychological effect of severe acute respiratory syndrome on emergency department staff, Emergency Medicine Journal, 24: 12–7. https://doi.org/ 10.1136/emj.2006.035089 PMID: 17183035
- Mo, Y., Deng, L., Zhang, L., Lang, Q., Liao, C., Wang, N., ... & Huang, H. (2020). Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. Journal of Nursing Management, 28(5), 1002-1009.
- Morley, G., Grady, C., Mccarthy, J., & Ulrich, C. M. (2020). COVID-19: Ethical Challenges for Nurses. Hastings Center Report.
- Munster, V. J., Koopmans, M., van Doremalen, N., van Riel, D., & de Wit, E. (2020). A novel coronavirus

- emerging in China—key questions for impact assessment. New England Journal of Medicine, 382(8), 692–694. https://doi.org/10.1056/NEJMp 2000929
- Ogolodom, M. P., Mbaba, A. N., Alazigha, N., Erondu, O. F., Egbe, N. O., Golden, I., ... & Eke, C. M. (2020). Knowledge, Attitudes and Fears of HealthCare Workers towards the Corona Virus Disease (COVID-19) Pandemic in South-South, Nigeria. Health Science Journal.
- Pan, R., Zhang, L., & Pan, J. (2020). The Anxiety Status of Chinese Medical Workers During the Epidemic of COVID-19: A Meta-Analysis. Psychiatry Investigation, 17(5), 475.
- Rosa, W.E., et al. (2020) Rapid investment in nursing to strengthen the global COVID-19 response. International Journal of Nursing Studies.
- Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. JAMA, 323(21), 2133-2134.
- Shen, X., Zou, X., Zhong, X., Yan, J., & Li, L. (2020). Psychological stress of ICU nurses in the time of COVID-19.
- The Lancet. (2020). COVID-19: protecting health-care workers. Lancet (London, England), 395(10228), 922. https://doi.org/10.1016/S0140-6736(20)30644-9
- Turale, S., Meechamnan, C. & Kunaviktikul, W. (2020) Challengingtimes: Ethics, nursing and the COVID-19 pandemic. International Nursing Review, 67 (3), 164– 167.
- Turale, S., Meechamnan, C., & Kunaviktikul, W. (2020). Challenging times: Ethics, nursing and the COVID-19 pandemic. International nursing review, 67(2), 164-167.
- Velavan, T. P., & Meyer, C. G. (2020). The COVID-19 epidemic. Tropical medicine & international health, 25(3), 278. doi: https://doi.org/10.1111/tmi.13383.
- Wang, J., Xu, C., Wong, Y. K., He, Y., Adegnika, A. A., Kremsner, P. G., ... Tu, Y. (2020). Preparedness is essential for malaria-endemic regions during the COVID-19 pandemic. The Lancet, 395(10230), 1094–1096. https://doi.org/10.1016/S0140-6736(20)30561-4
- World Health Organization (2020) Coronavirus disease (COVID19) pandemic. https://www.who.int/emergencies/diseases/novelcor onavirus-2019. Accessed 25 th Nov 2020.
- World Health Organization. (2020, March3). Shortage of personal protective equipment endangering health workers worldwide. https://www.who.int/news-room/detail/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide Erişim tarihi: 15.11.2020

Zerbini, G., Ebigbo, A., Reicherts, P., Kunz, M., & Messman, H. (2020). Psychosocial burden of healthcare professionals in times of COVID-19–a survey conducted at the University Hospital Augsburg. GMS German Medical Science, 18. https://COVID.cdc.gov/COVID-data-

<u>tracker/#health-care-personnel;</u> Access Date: 17.11.2020.

 $\underline{https://www.2020year of the nurse.org/}; \ Access \ Date: \\ 21.11.2020.$

https://www.cdc.gov/coronavirus/2019-ncov/global-

COVID-19/pregnant.html, Access Date: 15.11.2020.

https://www.icn.ch/sites/default/files/inline-

files/PR_52_1500%20Nurse%20Deaths_FINAL-3.pdf;

Access Date: 21.11.2020