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GENERAL ARTICLE

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Experiences of nurses providing care to patients with COVID-19 in intensive care units: A qualitative study

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Abstract

Aim: The aim of this study was to evaluate the experiences of nurses providing care to intensive care unit patients diagnosed with coronavirus disease 2019 (COVID-19) in Turkey.

Methods: The research employed the descriptive phenomenological approach. The interviews were analyzed with Colaizzi's seven-step method.

Results: The experiences of nurses providing care to COVID-19 patients in the intensive care unit can be summarized under three themes. It was determined that all nurses experience physical, psychological, and social difficulties along with negative emotions during the care process for COVID-19 patients, for which nurses use coping processes.

Conclusion: This study shows the difficulties faced by nurses who provide intensive care to patients with COVID-19. It is important to identify these challenges early to protect and improve the health of nurses.

KEYWORDS

coronavirus disease 2019, experience in caring for patients in ICUs, nurses', qualitative study

1 | INTRODUCTION

Coronaviruses (CoV) are a large family of viruses that cause a variety of diseases, from colds to more severe diseases. The World Health Organization (WHO) was informed about pneumonia cases of unknown cause in Wuhan City, China on December 31, 2019. A new CoV was identified as the cause by Chinese authorities on January 7, 2020; it was temporarily named "2019-nCoV." On March 11, 2020, the WHO announced that it named the virus COVID-19, a species belonging to the CoV family, and declared its spread as a pandemic.[1] The first COVID-19 case in Turkey was detected on March 11, 2020. In the city where this study was conducted,[2,3] the first case was detected on March 23, 2020. In the current globalized world, the spread of COVID-19 has been faster than expected, and it has become a serious public health problem.[4] For the week ending on August 16, 2020, WHO reported 21.2 million confirmed COVID-19 cases, while in Turkey, the Turkish Ministry of Health (MoH) reported 251,805 COVID-19 cases on August 19. As per MoH data on August 19, 2020, the number of patients with severe COVID-19 was 703 and rate of pneumonia was 7.4%.[3,5] Signs of COVID-19 infection may be mild, moderate, or severe. Patients may present with a severe respiratory infection (pneumonia), acute respiratory distress syndrome, sepsis, septic shock, myocarditis, arrhythmia, and multiple organ failure with cardiogenic shock.[6,7] Therefore, monitoring of patients with severe conditions should be carried out in intensive care units (ICUs). In a study conducted in Wuhan, China, it was reported that 26.1% (20%–30%) of 138 hospitalized patients were transferred to intensive care, and approximately half of them (47.2%) required invasive mechanical ventilation.[7] COVID-19 patients in intensive care suffer from a more complex and incurable form of the disease, and the high infectiousness of the disease makes it difficult to care for COVID-19 patients. Nurses in these units work in a more stressful, troubled environment than those working in other hospital units; therefore, experiencing certain physical, psychological, and social problems is inevitable.[8,9] In the first study on healthcare professionals in the city of Wuhan, where the COVID-19 pandemic first

appeared, it was found that 71.3% of healthcare professionals had below threshold and mild, 22.4% had moderate, and 6.2% had severe mental health disorders right after the pandemic.[10] In another study, it was determined that nurses experienced negative emotions or conditions such as fatigue, discomfort, fear, anxiety, and helplessness early in the care process.[11]

Nurses working in intensive care should have sufficient knowledge and skills to provide quality, holistic patient care and to perform their roles efficiently and effectively. Intensive care nurses receive training for all the requisite competencies through certificate programs according to nationally recognized standards; in Turkey.[12] However, because of the pandemic, nursing service nurses and freshman nurses without any intensive care experience began working in COVID-19 ICUs in the hospital where this study was conducted after receiving a short course on the care of COVID-19 patients and protocols in ICUs. Nurses, especially those without intensive care and infectious disease experience, face a greater risk of COVID-19 transmission and difficulties in adapting to their new work environments. Thus, their health may be affected in all dimensions (physical, psychological, social). There are studies in the literature on the experience of healthcare personnel in the process of caring for COVID-19 patients. As of yet, there are no such studies in Turkey.[8–11]

Identifying the experiences and difficulties faced by nurses caring for COVID-19 patients during the pandemic and learning key lessons will help to create crisis action plans to achieve the desired performance without succumbing to exhaustion in the fight against COVID-19, thus achieving a sustainable solution. Therefore, the present study was conducted to determine the experience of nurses giving care to patients with the diagnosis of COVID-19 in ICUs.

2 | METHODS

2.1 | Study design and participants

Throughout this study, the authors followed the Standards for Reporting Qualitative Research.[13] This qualitative study was designed according to a descriptive phenomenological approach to evaluate the experiences of nurses who provided care to patients with the diagnosis of COVID-19 in ICUs. Descriptive phenomenology describes individuals' daily life experiences, as well as the meanings of these experiences as interpreted by those who live them.[14,15] The sample for this study consisted of 12 nurses providing care to COVID-19 patients in an ICU who agreed to participate in the research. To be included in this study, nurses were required to be over the age of 18 years and to have cared for patients diagnosed with COVID-19. The study sample was chosen via the snowball technique, which is a purposive sampling method. There are five ICUs in the hospital where this study was conducted, and three of the ICUs with 20 beds capacity were allocated to COVID-19 patients during the pandemic. At the same time, 110 nurses were assigned to provide care for COVID-19 patients in these units. A questionnaire including the demographic characteristics of nurses and a semi-structured interview form developed by the researchers were used to collect data. The data were collected between 25 May, and 28 May, 2020, in Kırşehir.

After review of the relevant literature, the authors developed an interview form which consisted of three semi-structured questions as follows:

- What did you feel while caring for an individual diagnosed with COVID-19?
- What were your difficulties as a nurse during the COVID-19 outbreak?
- Could you please explain your views on your coping strategies when caring for a patient diagnosed with COVID-19?

All interviews were conducted by the researchers. The data were collected via an individual, in-depth interview technique. Due to the safety measures taken within the scope of COVID-19, individual, in-depth interviews were conducted by researchers in a one-on-one, face-to-face format via the Internet. In the first stage, the aim and content of the study were explained and an appointment plan was established. In the second stage, individual interviews were conducted with each participant. Each participant was interviewed three times. During each interview, the interviewer and participant were alone. The interviews were also recorded with permission from participants. Sessions were terminated when the obtained data began to be repetitive. Each interview lasted for an average of 30–35 min. İnterview reports recorded in writing, reviewed by the authors. Interview transcripts were sent to the participants for approval, further comments, and/or corrections.

2.2 | Data analysis

The interviews were analyzed with Colaizzi's seven-step method.[16] The analysis included reading the transcript several times to gain an understanding of meanings conveyed, identifying significant phrases and restating them in general terms, formulating meanings and validating meanings through research team discussions to reach consensus, identifying and organizing themes into clusters and categories, and developing a full description of themes.[16,17] The acquired themes and codes were examined by an expert, experienced academician apart from the main researchers, and the results were determined to overlap. Audio recordings were transcribed and missing expressions were completed by comparing the written material and audio recordings. The data from the interviews were sorted according to the themes developed by the researchers.

2.3 | Validity and reliability of qualitative data

In qualitative research, the term “trustworthiness” is used instead of validity and reliability. In qualitative research, it is stated that four basic criteria should be considered for credibility, dependability, confirmability, and transferability.[15,18]

Credibility was achieved by in-depth interviews followed by peer debriefing. Two coauthors analyzed the transcripts independently by bracketing data on preconceived ideas and strictly following the adapted Colaizzi's method described above. For ensuring credibility, the researchers independently read the transcripts repeatedly and classified the interviews. For ensuring dependability, all translated transcripts were reviewed by two bilingual experts fluent in English and Turkish who were experienced in qualitative research and were aware of the subject of the study. For ensuring confirmability, the original interviews were adhered to and the responses of the nurses were presented directly.

To ensure transferability, the research sample, environment, and process were presented clearly. Intertextual participant statements were quoted directly, and detailed definitions were developed between the studied context and the study itself.

To strengthen the validity of the findings obtained from the research, direct quotations were made from the statements of the nurse participants when interpreting findings.

2.4 | Ethical approval

Ethical permission (Decision No:2020-09/59) was obtained from the Clinical Research Ethics Committee of a University to conduct the research. Permission was also granted by the Council for Scientific Research Studies of the Directorate General of Health Services affiliated with the MoH, Republic of Turkey. In addition, an oral explanation was made to nurses about the research, and informed consent was obtained from the nurses who volunteered to participate in the research. The names of the participants were kept confidential and codes (N1, N2, N3...) were assigned to the nurses.

3 | RESULTS

All nurses who participated in the study provided care to COVID-19 patients in intensive care and were still working in ICUs at the time of the interview. Five nurses were male and seven were female. The mean age was 26.00 ± 4.39, and four nurses had no work experience. Those four nurses had no previous nursing experience and no previous ICU experience. The duration of work in COVID-19 intensive care was at least 10 days, and no more than 2 months (Tables 1 and 2).

3.1 | Theme 1: Fear and anxiety compromise care

This theme, included the negative emotions of the participants. In general, nurses expressed that they experienced negative emotions and thoughts while giving care to patients with COVID-19 in

TABLE 2 Themes, subthemes identified in interviews with nurses

Themes	Subthemes
Theme 1. Fear and anxiety compromise care	• Becoming aware of feelings; negative emotions • COVID-19 phobia
Theme 2. Difficulties in caring for COVID-19 patients in intensive care	• Physical difficulties • Psychological difficulties • Social difficulties difficulties • Stigma
Theme 3. Coping with the difficulties in caring for COVID-19 patients in intensive care	• Family and friend support • Spırıtual support • Psychosocial support

Abbreviation: COVID-19, coronavirus disease 2019.

TABLE 1 Characteristics of participants

Code	Age (years)	Marital status	Gender	Original department	Work experience	Work experience in COVID-19 intensive care
N1	31	Married	Male	Operating room	9 years	1.5 months
N2	24	Single	Female	Internal medicine service	None	1 month
N3	35	Married	Male	Operating room	17 years	1 month
N4	23	Single	Male	Surgical service	None	10 days
N5	25	Single	Male	Internal medicine service	None	2 months
N6	24	Single	Female	Anesthesia	1.5 years	1 month
N7	29	Single	Female	Children's intensive care	10 years	2 months
N8	21	Single	Female	Neurology	1.5 months	1 month
N9	22	Single	Female	Operating room	4.5 months	1.5 months
N10	31	Married	Male	General intensive care	9 years	2 months
N11	24	Married	Female	Operating room	1.5 years	1.5 months
N12	23	Single	Female	Internal medicine service	None	2 months

Abbreviation: COVID-19, coronavirus disease 2019.

intensive care. This theme was divided into two subthemes: (a) becoming aware of feelings; negative emotions and (b) COVID-19 phobia.

3.1.1 | Subtheme I: Becoming aware of feelings; negative emotions

While providing care to patients, nurses experienced negative emotions such as "stress, fear, anxiety, pessimism, fatigue, nervousness, despair, tension, curiosity, sadness, inability, resentment, and loneliness." The most intense feelings of anxiety, stress, anger, hopelessness, and loneliness were expressed by the participants. They expressed these feelings as follows.

A 24-year-old female nurse had her first work experience in the COVID-19 ICU and shared her negative emotions with the following:

> I am very anxious and hopeless because the patients we care for are suffering from a disease that is widespread worldwide and still has no vaccine or clear treatment. (N2)

A 23-year-old nurse, who had no work experience after ten days in the COVID-19 ICU for only 10 days, shared her intense stress and feeling of inadequacy with the following quotation:

> I work under intense stress because I have never cared for an individual with an infectious disease. I'm experiencing a sense of incompetence.... (N4)

A 25-year-old male nurse with no previous work experience who began working in the COVID-19 ICU for only 2 months, shared his feelings with the following quotation:

> When working with these patients, I was both upset and angry, and I felt all alone. (N5)

Participants experienced these negative emotions during their first nursing experience while providing care for COVID-19 patients Along with these negative feelings, the uncertainty experienced by the nurses during the illness could cause COVID-19 phobia.

3.1.2 | Subtheme II: COVID-19 phobia

Nurses stated that the prevalence and high transmission rates of COVID-19—this being their first encounter with an infectious disease; the complex nature of the disease; and lack of treatment, vaccination, and so forth. were the causes for these feelings and thoughts.

A 31-year-old, married male nurse with 9 years of previous experience and in the COVID-19 ICU for a month and a half shared his fear for both himself and his family with the following quotation:

> I mostly experienced fear... I think and fear that in the future myself or anyone in my family may encounter this disease. (N1)

A 23-year-old female nurse having her first experience in the COVID-19 ICU and with no previous work experience before shared her concern about the contagiousness of the disease with the quotation below:

> The transmission of the disease is too fast, and I'm very pessimistic about its treatment. I feel very nervous because I have been in close contact with patients and I am afraid of contagion. (N12)

These intense negative emotions experienced by the participants in the process of care for the COVID-19 patients may also caused them to experience some physical and social challenges in the ICU.

3.2 | Theme 2: Difficulties in caring for COVID-19 patients in intensive care

Nurses expressed the "physical" as well as "psychological" and "social" difficulties they experienced in the process of providing care for COVID-19 patients in intensive care. This theme was divided into four subthemes: (a) physical difficulties, (b) psychological difficulties, (c) social difficulties, and (d) stigma.

3.2.1 | Subtheme I: Physical difficulties

Nurses are working under newly emerging conditions as a result of the COVID-19 pandemic. The long hours of personal protective equipment use in intensive care was expressed several times as a great physical challenge by nurses.

A 24-year-old female nurse, who has one and a half years of work experience and has been working in the COVID-19 ICU for a month, shared the physical difficulties she experienced due to protective equipment with the quotation:

> The boots and galoshes we wear on our feet; the box apron we wear; and three layers of gloves, cap, surgical mask, protective overalls, N95 masks, goggles, and the visor—we have had to work like astronauts. (N6)

A 29-year-old female nurse, who has 10 years of work experience and has been working in the COVID-19 ICU for 2 months, shared the difficulty of working with protective equipment with the quotation:

> ...working with protective equipment such as overalls, glasses, boots, and visor... really pushes the limits of patience. (N7)

A 21-year-old female nurse working in the COVID-19 ICU for a month shared the effects of long-term work with protective equipment with the quotation:

> I perspired so badly because of hours of working with protective equipment… deep marks and abrasions occurred on my forehead and nose from the visor and goggles. (N8)

As illustrated in the sentences above the; participants expressed the difficulties of working with protective equipment and at the same time, stated that they could not even meet their vital physiological needs.

> I had difficulty breathing because of the protective equipment I had to use. (N9)

The statements exemplify their experiences under this theme. The nurses stated that they could not even meet their basic needs from time to time because of working long hours with protective equipment:

> Since we could not remove the equipment, we could neither drink water nor go to the toilet during the time we worked. (N1)

Since the participants could not meet even their most basic needs of vital importance, their own health was endangered. A participant expressed this problem as follows.

> Some of our colleagues had problems of low blood pressure due to excessive perspiration because they did not drink water to avoid having to urinate or going to the toilet Some of our colleagues used (wore and urinated into) patient diapers when they had to drink water (because they could not use the toilet in the room) (N11).

3.2.2 | Subtheme II: Psychological difficulties

With none of the nurses having previous infectious disease experience, increased workload and the process of caring for COVID-19 patients in the ICU resulted in psychological difficulties.

A 31-year-old male nurse, who had 9 years of work experience and practiced in the COVID-19 ICU for 2 months, shared the psychological strain he experienced due to the condition of the patients with the quotation:

> I was very affected by the bad state of the patients. (N10)

A 23-year-old male nurse, who had only 1 day of work experience, shared the psychological distress he experienced due to the cardiac arrest of patients with the following quotation:

> I experienced sadness and grief in cases of arrest. (N4)

> I'm experiencing the difficulty of working hard and going through a difficult process…. (N12)

Two nurses working in the COVID-19 ICU shared their experiences due to the unknowns of the disease with the following quotes:

> My mind was so messed up that I didn't want to see or talk to anyone. I felt despair… (N2) and it's not a disease we know of, after all; we're just learning things, so it's very backbreaking. (N11)

3.2.3 | Subtheme III: Social difficulties

The nurses experienced social difficulties because of the possibility of infecting loved ones and others.

The 35-year-old male nurse with 17 years of experience and assigned to the COVID-19 ICU for a month, shared the social difficulty he experienced due to the transmission of the disease with the following quotation:

> We stayed in intensive care during our working hours; we couldn't get to a corridor, canteen, or terrace because of the possibility of contagion. (N3)

> I miss the times before the pandemic so much. I cannot see my family and loved ones… (N11); and I have a fear of infecting people around me, so I don't meet anyone. (N5)

3.2.4 | Subtheme IV: Stigma

During the COVID-19 pandemic process, health workers were perceived as disease carriers by society and therefore, they felt excluded. One of the nurses working in intensive care spoke about the social difficulties caused by the stigmatizing behaviors of others:

> It bothers me very much that people around me treat people caring for COVID-19 patients negatively and that they discriminate against us…. (N7)

3.3 | Theme 3: Coping with the difficulties in caring for COVID-19 patients in intensive care

Nurses stated that they were trying to cope with the difficulties in caring for individuals with COVID-19 through support from colleagues, families, and friends; empathizing with patients; seeking spiritual energy within; thinking positively; and receiving support from experts. This theme was divided into three subthemes: (a) family and friend support, (b) spiritual support, and (c) psychosocial support.

3.3.1 | Subtheme I: Family and friend support

The nurses participating in the research stated that the support of their family and close friends was important in coping with the difficulties they experienced, while giving care to COVID-19 patients.

A 21-year-old female nurse, who has been working in the COVID-19 ICU for a month, shared her family support in coping with her difficulties with the following quotation:

> When I got the chance, I talked to my family, and when I had a hard time, I called my close friends. (N8)

> I do not know what I would have done without the support of my family and colleagues. (N4)

3.3.2 | Subtheme II: Spiritual support

Nurses also clung to their religious beliefs to cope with the difficulties they experienced in caring for individuals with COVID-19. The statements of some participants were as follows:

> I tried to cope in the way that my religious faith allows: I prayed constantly. (N11)

3.3.3 | Subtheme III: Psychosocial support

Most of the participants mentioned empathy and the support of their relatives in the coping process. The participant who could not cope with this process stated that she received expert support. The statements of some participants were as follows:

> I spoke to my relatives constantly. When I realized that I could not cope, I received expert support. (N2)

A 22-year-old female nurse working in the COVID-19 ICU for one and a half months (N9) and a 31-year-old male nurse working in the COVID-19 ICU for 2 months (N10) shared their experiences in terms of psychosocial support with the quotations:

> I always thought that the disease would end, I forced myself to think positively… (N9) and I tried to think of the patients under treatment as members of my family; they had no one to help them but us. (N10)

4 | DISCUSSION

The nurses who participated in this study were young (26.00 ± 4.39), and four of them had just started their professional career working in COVID-19 intensive care. At the same time, because this study was conducted at the beginning of the COVID-19 pandemic, nurses had little to no work experience in COVID-19 intensive care.

In the present study, nurses' experiences with regard to the care process were grouped under three themes: "fear and anxiety compromise care"; "difficulties in caring for COVID-19 patients in intensive care"; and "practices to cope with the difficulties experienced."

In the present study, it was found that nurses experience negative emotions such as "stress, fear, anxiety, pessimism, fatigue, nervousness, despair, tension, curiosity, sadness, incompetence, resentment, and loneliness" while caring for COVID-19 patients. Previous studies have also shown that nurses caring for patients with novel infectious diseases such as severe acute respiratory syndrome, Middle East respiratory syndrome coronavirus, Ebola, or H1N1 experienced loneliness, anxiety, fear, fatigue, weakness, stress, alienation, frustration, fragility, threat, and sleep disorders.[19–23] The COVID-19 monitoring board of the Turkish Medical Association (TMA) mentioned the exhaustion and burnout experienced by healthcare personnel in the fifth month (August 14, 2020) assessment of the COVID-19 pandemic and stated that 53 health workers, 27 of whom were physicians, had died from COVID-19.[24] While health personnel are trying to maintain the provision of routine health services, increasing demand for the care of COVID-19 patients have put health workers, especially nurses who are in close contact with patients, under immense pressure.

ICUs have numerous work-related stress factors because of their structure and the nature of the service they provide; furthermore, the novel and unknown nature of the COVID-19 infection, lack of available drugs or vaccines, and the problems faced in maintaining a sufficient level of readiness for a pandemic may have caused nurses to experience difficulties in the process of caring for these patients in ICUs.

Intensive care nurses are known to experience physical, social, and psychological health problems because of the way they work and their working conditions.[25] In a study conducted by Ak and Esin,[26] intensive care nurses had more gastrointestinal complaints such as disorders of appetite, constipation, and diarrhea compared to nurses working in other departments and had problems related to the circulatory system such as high blood pressure. Şentürk's[27] study found that intensive care nurses had poor sleep quality and experienced low levels of burnout. In addition to all these difficulties, intensive care nurses had to work in health institutions caring for patients 24 h/7 days a week during the pandemic which was outside of their normal working hours and days. They experienced difficulties because of the working environment and conditions. Furthermore, the insufficient work experience and intensive care experience of the nurses participating in this study surely contributed to the difficulties they experienced. In the present study, nurses mostly expressed the physical difficulties in the process of caring for COVID-19 patients in intensive care but also mentioned the "psychological" and "social" difficulties they experienced. In a qualitative study in China, doctors and nurses noted that long hours of working with personal protective equipment is an immense physical challenge.[9] A nurse working in intensive care in Turkey stated that she had physical and emotional

difficulties in the process of caring for COVID-19 cases. This nurse attributed her physical difficulties to working with protective equipment for long hours; her emotional difficulties included seeing her colleagues being diagnosed with COVID-19, and some of her colleagues even dying of the infection.[4] The standard procedure on the WHO website and in the COVID-19 guidelines of the Turkish MoH states that droplet and contact isolation measures should be taken in COVID-19 cases and necessary personal protective material such as gloves; aprons (nonsterile, preferably liquid impermeable and with long sleeves); medical masks (surgical mask)—at least N95/FFP2 caliber during procedures causing droplet/aerosolization); face protection; and goggles should be worn by personnel coming in contact of up to 1 m with COVID-19 cases.[3,24,28] The difficulties that nurses often express in the process of caring for COVID-19 patients in intensive care are physical, but protection from COVID-19 and disease control can only be possible when nurses take necessary isolation measures (e.g., contact, droplets, and respiration) because of the high transmissibility of the virus.

Strict isolation measures during a pandemic are crucial for effective control of infection in the healthcare environment. However, these isolations can be a serious source of anxiety for both patients and healthcare workers and their families.[29] As a matter of fact, nurses living with their families stated that they were concerned about infecting family members with the virus, especially their children and their parents. Another study conducted in China found similar concerns among healthcare personnel.[9] In the present study, nurses who were worried about infecting their families during the pandemic expressed that they overcame the difficulties they experienced because of the support that their families and friends extended. Furthermore, nurses were able to cope with these difficulties by empathizing with patients, seeking spiritual energy within, thinking positively, and receiving support from experts when needed. Other studies reported a coping process involving the multidimensional support of nurses, patients, family members, team members, state, social groups, and so on.[30,31] Based on the results of the present study and previous research, it can be said that social support is critical for nurses in the fight against epidemics or pandemics.

Nurses play a key role in responding to pandemics by working on the front lines, under the most difficult conditions in serious epidemics that affect the world, such as the COVID-19 pandemic.[32] As a matter of fact, in a report published by TMA, the most affected occupational group was nurses among 100 healthcare professionals diagnosed with COVID-19 (20 physicians, 31 nurses, 12 technicians, 19 caregivers, and 18 other professional groups).[28] Based on the results of the present study, it is clear that nurses have been adversely affected in a multidimensional manner (i.e., physically, psychologically, and socially) as a result of working in COVID-19 ICUs during the pandemic. Appropriate manpower planning, especially with regard to nurses, is crucial to provide the necessary treatment and care for patients with COVID-19 who need intensive care, while protecting healthcare workers.

5 | CONCLUSION

This study shows the difficulties faced by nurses who provide intensive care to patients with COVID-19. It was determined that all nurses experience physical, psychological, and social difficulties along with negative emotions during the care process for COVID-19 patients, for which nurses use coping processes. Nurses stated that they were trying to cope with the difficulties in caring for individuals with COVID-19 through support from colleagues, families, and friends; empathizing with patients; seeking spiritual energy within; thinking positively; and receiving support from experts. It is important to identify these challenges early to protect and improve the health of nurses. In addition, these difficulties can be prevented by training the nurses who will work in intensive care in the future. Therefore, comprehensive support for nurses should be provided to address the adversities experienced by them.

This study was conducted in Turkey early in the pandemic. It would be good to determine if there are differences and similarities in other countries. As the pandemic and care for the disease continues, changes in nursing care for these patients and the responses of nurses may differ from the early experiences. For further research, similar practice and academic partnership studies in different countries are recommended. In the undergraduate nursing curriculum, the COVID-19 pandemic was included in the infectious diseases and intensive care nursing course. Supervising nurses should play an active role to create emergency action plans and responses to pandemic emergencies in their institutions. In-service trainings have been started to be given regularly by infection nurses to the nurses who care for COVID-19 patients in ICUs in Turkey. However, all policies regarding pandemics should be reviewed and aimed at improving employee rights, to provide a safe work environment and conditions for healthcare workers.

6 | LIMITATIONS

This study was conducted only with nurses working in Turkey. The results of this study can only be generalized to the individuals included in the study.

ACKNOWLEDGMENT

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

ETHICS STATEMENT

Ethical permission (Decision No: 2020-09/59) was obtained from the Clinical Research Ethics Committee of Kırşehir Ahi Evran University to conduct the research. By explaining the purpose and benefits of the study, written and verbal consent of all the participants were obtained.

DATA AVAILABILITY STATEMENT

Owing to confidentiality issues, data sharing is not applicable to this article.

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