Tehran University of Medical Sciences

Nursing Practice Today

2023; Volume 10, No 2, pp. 124-137

Original Article

Experiences of intensive care nurses working with patients with COVID-19: A qualitative study in Turkey

Elif Gursoy[1], Havva Yesildere Saglam[2], Nurgul Simal Yavuz[3]*

[1]Department of Nursing, Faculty of Health Sciences, Eskisehir Osmangazi University, Eskisehir, Turkey
[2]Department of Nursing, Faculty of Health Sciences, Kütahya Health Sciences University, Kütahya, Turkey
[3]Department of Midwifery, Faculty of Health Sciences, Lokman Hekim University, Ankara, Turkey

ARTICLE INFO

Received January 11 2023
Accepted April 25 2023

Available online at:
http://npt.tums.ac.ir

Keywords:
COVID-19;
intensive care units;
nursing experience;
qualitative studies

***Corresponding Author:**
Nurgul Simal Yavuz, Department of Midwifery, Faculty of Health Sciences, Lokman Hekim University, Ankara, Turkey.
E-mail: nurgulsimal@gmail.com

DOI:
10.18502/npt.v10i2.12833

ABSTRACT

Background & Aim: The outbreak of the COVID-19 pandemic has disrupted healthcare systems. Nurses were deeply affected physically, psychologically, and socially. This study was conducted to examine the experiences and perceptions of intensive care nurses who provide care for patients with COVID-19 during the pandemic process.
Methods & Materials: This qualitative study was conducted using the content analysis approach. This research was carried out with 11 nurses working in the intensive care unit and caring for COVID-19 patients between May and September 2021. A purposive sampling method was used to include nurses in the study. The data of the research were collected with an eight-question semi-structured interview form and in-depth interview technique. The data were analyzed by using the content analysis method.
Results: The six main categories identified in this study were challenging working conditions, tiredness, isolation and loneliness, fear, and helplessness, lack of management support, and expectations and needs.
Conclusion: This study has shown that intensive care nurses who care for COVID-19 patients in Turkey are greatly adversely affected physically, psychologically, and socially by the pandemic process. In this process, it is extremely important to improve the financial and moral support for nurses. Policymakers and managers should try to reduce the physical, psychological, and social impacts of the pandemic on nurses by focusing on their experience and taking appropriate action.

Introduction

The COVID-19 pandemic, which the world has been fighting against since December 2019, has been prevailing with an aggressive course for over two years (1). In this long-lasting process, countries' health systems and health workers have been worn out significantly. Physicians and nurses, in particular, have experienced many physical and mental problems due to long working hours, the high risk of contamination, being away from their families, the uncertainty of the process, the lack of adequate personal protective equipment, and difficult working conditions that arise due to this (2-4). Especially with the increasing number of cases, the nurses working in the COVID-19 intensive care units, whose numbers are increasing, have been the group that works the hardest and communicates with the patients the most (5). Unfortunately, intensive care nurses could not see effective support mechanisms in return for their struggle under difficult working conditions. Nurses have experienced the pandemic process more heavily due to providing long-term care for patients, increased workload, inadequate staff,

Please cite this article as: Gursoy E, Yesildere Saglam H, Simal Yavuz N. Experiences of intensive care nurses working with patients with COVID-19: A qualitative study in Turkey. Nursing Practice Today. 2023; 10(2):124-137

low income, and lack of enough support from their managers (6). COVID-19 intensive care nurses have been under a much more intense workload than their other colleagues in terms of their working environment and patient profiles. They have been psychologically worn out and experienced burnout more (6, 7).

It has been reported that nurses are physically and mentally stressed during disasters and epidemics, and they feel lonely and helpless due to work pressure (6). We know that in studies conducted during previous pandemics, health professionals have experienced various problems, such as the risk of infection and transmission, anxiety, stress, fear, anxiety, anger, and frustration (8, 9). In a previous study, psychological problems experienced by health personnel, the risk of infection, and the fear of transmitting the infection were mentioned (8). Another study stated that nurses decided to quit their job because they perceived personal risks as too high at that time (7). Despite previous pandemic experiences such as SARS in 2003 and H1N1 in 2009, little is known about the experiences of intensive care nurses in the literature (6, 7, 9). We thought that these problems could be experienced similarly in the COVID-19 pandemic. However, no study has been found focusing on the experiences of intensive care nurses who have been in close contact with patients in the past years. In addition, in the past years, changes and developments have occurred in health systems. A better understanding of nurses during the COVID-19 pandemic will be an important step in improving intensive care unit nursing and patient care outcomes in this process and in the future. For this reason, this study was conducted to examine in-depth the nursing and caregiving experiences of COVID-19 intensive care nurses in Turkey, who were most severely affected by the pandemic period.

Methods

This qualitative study was conducted using the content analysis approach. Throughout this study, the authors followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) (10).

Participants were selected among nurses working in a hospital located in the Central Anatolian Region of Turkey. The reason for choosing this hospital is that COVID-19 patients in the region are mostly treated here. In addition, the fact that the number of intensive care units and the number of nurses working in the hospital where the study was carried out is the highest is another reason for selection.

The study sample was selected by using the purposive sampling method. The inclusion criteria of the study were as follows: (1) having worked in the intensive care unit for at least one year prior to the pandemic; (2) working actively in the COVID-19 intensive care unit for at least the last three months; (3) being collaborative and open to communication; (4) agreeing to participate in the study. The study participants were to have at least one year of intensive care experience as an inclusion criterion because nurses can compare the pre-pandemic and pandemic processes and observe the changes.

This study was carried out with a face-to-face in-depth interview technique with 11 intensive care nurses who provided care for patients with COVID-19 in Turkey between May and September 2021 by using an inductive qualitative design.

After obtaining the necessary permissions for the study, the participants were contacted in line with the purposeful sampling method. The third author personally contacted potential participants and invited them to participate in the study. The nurses who volunteered to participate in the study were informed about the purpose of the study and how to do it. Face-to-face interviews were held with the nurses by making appointments

outside of working hours. All interviews were conducted with two researchers in an independent, quiet, and safe environment in a room close to the intensive care unit in the hospital. The interviews were continued until the repetitive data started to appear, and the study was concluded when the data saturation. In this study, data collection was continued after the 9th interview, but considering that the data was repeated, the data collection process was completed after the 11th interview.

The study data were collected by using a semi-structured interview form developed as a result of a literature review by the researchers. The form consists of two sections. In the first section, there are 10 questions to obtain demographic data, such as the nurse's age, education level, marital status, work experience, and working experience in other units before the pandemic. The second section consists of a form with eight open-ended questions to be used in semi-structured interviews. Semi-structured interview questions are given in the table below (Table 1). Two pilot interviews were conducted to test the semi-structured interview questions. After it was determined that the interview questions were clear and intelligible in the pilot application, the data form was applied to all of the nurses. A code was given to each of the participants in order not to reveal the identities of the participants and for data security.

During the data collection period, only one interview was held each day. All interviews were conducted by the same two researchers, and each interview took an average of 20-30 minutes. Interviews were recorded by using an audio recorder. During the data collection phase, the second researcher noted down her observations in a notebook. All interviews were recorded with the permission of the participants, and the recordings were transcribed by the interviewer on the evening of the interview day.

Table 1. Script of the semi-structured interview with the participating

- Could you tell us about your professional experience in nursing?
- Can you tell me about your experiences while working in intensive care in the pre-pandemic period?
- Can you tell me about your experiences working with patients with COVID-19 in intensive care?
- What experiences did you have after the start of the pandemic process?
- How do you feel physically in this process?
- How do you feel psychologically in this process?
- What do you think about your working conditions?
- What were your expectations or suggestions regarding the management of the COVID-19 pandemic process?

The research team consists of three people. All members of the teamwork in the faculty of health sciences (a professor, a research assistant, and a lecturer). One of the members of the team worked as a COVID-19 intensive care nurse for the first two years during the pandemic process. During the data collection process, this team member was working as an intensive care nurse. All researchers have previous experience working in hospitals as clinical nurses. All of them have been educated on qualitative research methods and have conducted qualitative studies.

The data were analyzed by using the content analysis method. To test for the rationality of data analysis and interpretation, the researchers performed the transcription and analysis of the data independently after the interview. Since the study was based on an inductive approach, no categories were defined beforehand. Braun and Clark's six-step method was used manually in the analysis of the data. According to Braun and Clark, the analysis of the entire data set, the coded excerpts of the data, and the analysis of the data involves a constant back-and-forward movement (11).

- In the first stage, the statements were read several times, and information about the topic and the experiences of the nurses were obtained. General notes were taken.
- In the second stage, initial codes were given to the data.
- Then the codes were reviewed, and categories and sub-categories were created.
- In the fourth stage, the categories were analyzed according to the participants' codes and statements.
- Then the categories were defined and named after they were finalized.
- Finally, participants' experiences and perceptions were reported (11).

The reliability of the research is the main factor in a qualitative study. The reliability of the study was evaluated according to four criteria (credibility, transferability, dependability, and confirmability) (12). Credibility was achieved by comparing the opinions of nurses who had different perspectives. For credibility, the maximum diversity of the sample group was considered as much as possible. During the data collection process, the reliability of the data was increased by using interviews, observations, and notes. At the same time, data collection, data analysis, and concept development processes were reviewed by an expert supervisor for credibility. For transferability, the researcher tried to fully explain the context in which the study was conducted by an accurate description of the participants, sampling method, and time and place of data collection so that the reader could have a positive view of data transferability. For dependability, a researcher who was not involved in the data collection and data analysis processes examined and confirmed these processes and research results. For confirmability, all activities, including study steps and how data were collected, were accurately recorded.

At the outset, the approval of the Ethics Committee of a university (date: March 2, 2021, and no: E-25403353-050.99-182179) and the TR Ministry of Health were obtained. This study was conducted in full accordance with the principles of ethics of the Declaration of Helsinki. All nurses in the study were included in the study after they were informed about the purpose and importance of the study, and their written and verbal consents were obtained. Also, they were informed that their participation was voluntary and that they could withdraw from the study at any time.

Results

The findings of the study were discussed in two sections. The first section included the personal and professional data of the nurses (Table 2), and the second part included findings obtained from interviews with participants (Table 3).

Table 2. Socio-demographic characteristics of the participants

Participant code	Age	Marital status	Number of children	Clinical work experience	Intensive care unit experience	COVID-19 intensive care unit
P1	35	Married	2	12 years	12 months	9 months
P2	26	Single	0	8 years	24 months	6 months
P3	33	Married	1	11 years	72 months	12 months
P4	26	Single	0	3 years	24 months	12 months
P5	28	Single	0	3 years	24 months	12 months
P6	28	Single	0	6 years	60 months	12 months
P7	27	Single	0	2 years	12 months	12 months

P8	27	Single	0	4 years	18 months	12 months
P9	36	Married	1	14 years	144 months	18 months
P10	28	Single	0	10 years	48 months	18 months
P11	24	Single	0	6 years	48 months	18 months

Table 3. Categories and sub-categories

Categories	Sub-categories
Challenging working conditions	• Overtime – uncertainty about working hours • Difficulties in the care environment
Tiredness	• Physical tiredness • Psychological tiredness
Loneliness	• Social stigma • Social disruption and isolation
Fear	• Uncertainty of the process • Helplessness
Lack of management support	• Organizational shortcomings • Perspective of management
Expectations and needs	• Psychological support • Financial support

A total of 11 nurses working in the COVID-19 intensive care unit were interviewed. Table 2 summarizes the characteristics of the participants.

In the study, 6 categories and 12 sub-categories were elicited. These categories are (1) challenging working conditions, (2) tiredness, (3) isolation and loneliness, (4) fear and helplessness, (5) lack of management support, and (6) expectations and needs.

Challenging working conditions

Overtime–uncertainty about working hours

Nurses stated that they experienced difficulties, especially when there was contamination or contact, because they were called to work at any time. Working hours were uncertain due to the inadequate number of staff. Busy shifts increased the workload of nurses providing care for patients with COVID-19 and made working conditions more difficult.

"…We are working under heavy conditions… While everyone was working flexible hours, we could not. We were in the hospital all the time…" (P5)

"… The number of patients is high; the number of nurses is low. Our workload is high; our friends have tested positive. There is no one to replace them. We can be called on duty all of a sudden...." (P6)

Difficulties in the care environment

Nurses stated that they experienced difficulties in providing care, eating and drinking, and meeting personal needs while working with a variety of equipment (masks, visors, overalls, or gloves) due to the rapid transmission of COVID-19.

"…Before the pandemic, we used to touch the patient without equipment. We did not wear masks, aprons, or visors. We were not behind thick goggles, suffocating masks…" (P2)

"…We soak wet in those overalls. We are covered in sweat and have to dress and give care again without changing our clothes. It is a really difficult process…" (P9)

Tiredness

Physical tiredness

Tiredness was another problem frequently highlighted by nurses. These categories were examined in two sub-categories, namely psychological/mental tiredness and physical tiredness. Nurses stated that they could not rest adequately due to the severe working conditions of the COVID-19 intensive care unit and that they experienced problems such as backache and headache, shortness of breath, and vision and sleep problems.

"... Our working conditions were very harsh. During this period, I suffered from severe back pain and joint pain. Sometimes I said, 'I guess I wouldn't understand if I had COVID-19'..." (P1).

"... I used to get very tired physically. I felt very tired when I left work and even had trouble sleeping when I got home ..." (P7).

Psychological tiredness

Nurses stated that they experienced serious psychological/mental tiredness due to the effects of the COVID-19 pandemic. These included stress, anxiety, helplessness, fear of death, and empathy tiredness. Despite their best efforts, nurses who lost their patients due to the rapid progression of the disease process and poor prognosis stated that they were adversely affected by this situation. Since they developed too much empathy with their patients, this situation led to empathy tiredness in nurses.

"...I feel bad psychologically because I have had many patients with whom I established communication and ties. They are ordinary people with a social life, just like us, and they suddenly end up in an intensive care room that they have never been to before. There are people around them constantly sticking needles into their arms; we are always right next to them. We are not in our clothes either. That is, they see us in an alien-like outfit. I have always tried to empathize with them. Empathizing with them has made me psychologically collapse..." (P2).

Loneliness

Social stigma

The category of isolation and loneliness was examined in two sub-categories: social stigma and social disruption and isolation. One of the most important problems experienced by nurses during the COVID-19 pandemic was the feelings of social exclusion, isolation, stigma, and loneliness because hospital employees were seen as virus carriers by society in this process.

"...This is how people react. They say, 'You are a nurse. We should stay away from you. You are looking after patients with COVID-19'...." (P9).

"… People around ask me if I work in COVID-19 intensive care. Then they try to move away. Of course, even though they try not to show it too much, it's clear..." (P4).

Social disruption and isolation

The separation of some nurses from their families and children due to social isolation caused them to experience loneliness. Some of them stated that they experienced stigma in social environments, both explicitly and implicitly.

"…I couldn't meet with many of my friends, family, and people I always meet with. I just traveled between home and work. I lived such a life for a while…" (P2).

"… The nicest thing I normally did was going home and hugging my son; I can't do that anymore…." (P3).

Fear

Uncertainty about the process

The fear category was analyzed in two sub-categories, namely, the uncertainty of the process and helplessness. Participants stated that they found themselves in the middle of uncertainty due to the vagueness of the disease process, lack of information about the disease, unclear treatment, and the appearance of different views on treatment worldwide.

"…Actually, not being able to see the end, not being able to see the end of the tunnel is very bad. The feeling of being in limbo actually wears you out a bit…" (P5).

"… We don't know what kind of disease it is. We were not expecting it to grow this big. After all, you know, it is a kind of influenza epidemic, but it has reached the size of a pandemic. At first, there was little information about it. We were nervous; we didn't know where this would extend to…." (P10).

Nurses experienced a lot of fear, anxiety, and uncertainty about catching COVID-19 or spreading the virus to their families and people around them. Faced with the increasing number of cases and death rates in an unusual and uncertain working environment, they also experienced great astonishment and despair.

"… My own sister did not meet with me. We did not meet for a year or so… so that there would be no contamination. I could not attend any of the family meetings…" (P10).

Helplessness

Nurses providing care for patients with COVID-19 stated that they experienced fear of death due to the rapid prognosis of the disease. The worsening of the disease picture, the increasing spread of the disease among young people, and the inability to save the patient sometimes, despite all efforts drove them to despair and helplessness. They especially stated that the loss of the patient affected them deeply.

"…To give an example, the death of the patient who I talked to the day before and who said she/he wanted to recover wore us out psychologically a lot..." (P3).

"For example, we position the patients so that the lungs receive air and recover. Sometimes it doesn't work; no matter what we do, nothing has an effect. The patient is getting worse. Then I feel so helpless. I feel burnt out…" (P4).

"…No matter what you do, you feel as if the condition of some patients deteriorates very quickly and our efforts are wasted…" (P5).

Lack of management support

Organizational shortcomings

Nurses thought that the hospital management could not manage the emerging crisis well. They stated that there were constant disruptions and shortcomings in the work organization due to planning errors. They stated that the uncertainties that emerged in this process exhausted them. Nurses were prevented from using their leave, they suffered injustice, and they were not paid fairly during the process.

"…Our working conditions were heavy, and we were very busy. We also worked overtime. All leaves were already canceled. We worked every other day, twenty-four hours a day most of the time... (P7).

The perspective of the management

Participants stated that they could not get enough support from the institution's managers and that the managers even ignored the employees' experiences and blamed them in case of contamination. In this process, participants stated that they felt worthless.

"…I don't think managers know our value very much. We had friends who had COVID in the early days. The managers came and complained by saying, 'How come you get

COVID? How can you get infected? You are not paying attention.' Hearing all these made me unhappy…." (P7).

"…An appreciation such as a simple thank you or thanks for your efforts was very important to us in this period. But even that was not done. On the contrary, constant mobbing and shift work every other day…." (P8).

Expectations and needs

Psychological support

In our study, most of the nurses stated that they were proud of working on the front lines and being a soldier in the army and showed a strong professional responsibility. Although they were proud of their profession, nurses were quite worn out in this process. The constant fear of being infected and spreading the disease caused them to experience psychological problems. However, the psychological and physical health of nurses was ignored. To get through this process healthily, they expected to be provided with psychological support, to be appreciated, to be valued, and especially to be understood.

"…I would like to be appreciated. As nurses, we took part in this war. We were on the front lines. I wish it were recognized. That is, it was appreciated. We were there too, but we were not seen. We were treated as if we were not there…" (P6)

"…You see that there is nothing motivating from the administration; instead, mobbing and expressions that demotivate rather than motivate …" (P9)

Financial support

Nurses also stated that they expected financial support. They expected a satisfactory salary, improvements in terms of working conditions, retirement, and social benefits, and a return on their efforts.

"…My presence is not visible. All healthcare professionals are applauded, which is very good. But we are not respected as nurses. This is very painful …" (P6)

"…I do not think that healthcare workers are valued very much by the country and the government. One day, the Ministry of Health said everyone would applaud healthcare workers at nine o'clock pm... That was all…." (P7)

"…We want psychological satisfaction because we are working in really difficult conditions. Of course, the financial dimension is also important. We receive even lower wages than most workers across the country. We work harder. Our night working conditions are very bad. We have to work twenty-four hours, for a very long time. Working for 24 hours is a very long time for the human body…." (P10)

Discussion

This study was conducted to determine the experiences of intensive care nurses who provided care for patients with COVID-19 during the pandemic process. The findings obtained via the in-depth interview method were analyzed, and the categories mes were determined. Six main categories were obtained: (1) challenging working conditions, (2) tiredness, (3) isolation and loneliness, (4) fear and helplessness, (5) lack of management support, and (6) expectations and needs. These six categories and sub-categories were interpreted in light of other studies in the literature.

Our study determined that nurses experienced many difficulties due to the worsening working conditions in the COVID-19 intensive care units, the increase in the number of patients, the inadequacy of the number of nurses, excess working hours, and the use of personal protective equipment while working. To manage the nursing shortage, nurses without intensive care experience have been employed in COVID-19 intensive care units, and these nurses constantly need education, which has confused the

environment. For all these reasons, difficulties in the working conditions of nurses in this process have become hard to cope with. The results of studies in the literature are similar to those of our study (7, 13). Intensive care units are complex units in terms of working conditions, even in non-pandemic times. In this process, it was determined that nurses were much more worn out because they had to spend the effort to tolerate inexperienced teammates, and all of their routines changed completely. According to the literature, nurses who do not have enough experience in intensive care cause extra stress for their teammates (14). Intensive care nurses felt responsible for training their inexperienced teammates and adapting them to the clinic. This has further increased their workload. For this reason, it is very important to follow the process by providing training and support for the new personnel (15, 16).

One of the most important results of this study was about the physical difficulty of the equipment used to prevent transmission during the COVID-19 period and the difficulty that they cause in providing active care. Nurses often stated that they felt as if they were stuck in a cage and that it was difficult to provide care for their patients without touching them directly. This situation negatively affected the quality of service and made the provision of care difficult during the holistic treatment of the patient. It was determined that nurses also had difficulties in meeting their individual needs while serving on this equipment. Similar to the results of our study, some studies have shown that due to the use of protective equipment, nurses have had some complaints, such as focusing problems, difficulty in providing care, inability to perform nursing skills actively, difficulty in eating/drinking and movement, wounds on the face, and visual impairment (17-19). It is clear that providing care with protective equipment hinders patient-nurse communication significantly. Especially considering that the intensive care patient profile consists of people with high mean age, it will be much more difficult to look after patients behind suffocating masks. This situation may negatively affect the patient's compliance with the treatment and the professional satisfaction of the nurse. The use of transparent masks, which can allow reading lip movements, can contribute to communication a little. At the same time, it is thought that the difficulties experienced in the working environment and patient care will reduce the commitment and compliance of nurses to the use of equipment. For this reason, it will be important for the continuity of care to provide training and follow-up to all personnel in line with the standards and regulations regarding the use of equipment in order to prevent a possible increase in contamination.

Another important result of our study was the physical and psychological/mental tiredness caused by the pandemic process in COVID-19 intensive care nurses. Both physical and mental fatigue caused the deterioration of the life flow of nurses and emotional fatigue in and outside the workplace. In our study, nurses who could not find enough time to rest due to their busy and irregular working hours experienced some problems, such as sleep disorders, shortness of breath, head-neck-back pain, chronic fatigue, and exhaustion. In addition to all these physical problems, many studies, in line with the findings of the study, have reported high levels of psychological fatigue due to stress and anxiety among nurses. It was determined that our study results were highly similar to those of the literature (17, 19, 20). In a survey conducted by the American Nursing Association (ANA) with approximately 10,000 nurses in September 2021, 52% of intensive care nurses stated that they were not mentally healthy. In the report published about nurses, it was stated that this trauma was irreversible but that it could be alleviated with government planning and the organizational

support of managers (21). It will be beneficial to establish support programs in the hospital on behalf of nurses working in our country and to encourage activities and exercise programs that can be carried out in pandemic conditions for physical and mental tiredness. At the same time, there is an urgent need to provide shorter working hours and increase the number of nurses in order to protect intensive care nurses from contamination and reduce physical and mental fatigue.

The most common problem faced by healthcare professionals, and especially nurses, during the COVID-19 pandemic is social isolation and exclusion, as they are seen as a source of contamination (22, 23). Similar results were obtained in this study, too. In the study, people around the nurses, including their families, thought they were carriers of the coronavirus and stayed away from nurses during the pandemic process. At the same time, many of the health workers preferred to isolate themselves from their loved ones in this process, stayed at separate homes, and did not see their loved ones for a long time. This situation has caused nurses to experience stigmatization and social exclusion. The data obtained from our study participants were consistent with the results of previous pandemics and the findings of studies conducted in this process (18, 19, 24-27). Social isolation and stigma were the pictures that we encountered during MERS-CoV and Ebola epidemics (26, 27). According to the study by Al-Tammemi, more than a third of the participants thought that health workers were positive and that contact with them should be avoided as much as possible (28). Stigma and isolation lead to negative emotions, such as stress, anxiety, sadness, and even some physical responses in people. It is thought that these responses from society may have profound effects on the mental health of nurses who already work under difficult conditions. For this reason, providing psychosocial support to nurses during crisis periods will both increase the quality of patient care and positively affect the health of nurses.

The uncertainty that has emerged since the beginning of the pandemic process and the lack of definite explanations about transmission routes, treatment, and ways of protection have created fear and helplessness in nurses. Psychological responses to crises are normal in such pandemic conditions (29). However, it is thought that factors, such as the uncertainty at the beginning of the process that took a long time, the aggressive course of the virus, young deaths, and the gradual increase in the number of infected people, may have triggered the fears and helplessness of nurses. It is thought that presenting guidelines and regulations regarding patient care and treatment to healthcare personnel in sudden outbreaks and pandemics will reduce fear, obscurity, and helplessness.

When our study findings were examined, it was found that situations such as providing one-to-one care for the patient during hours-long shifts but the patient's sudden deterioration and death, not being able to receive the reward for the effort spent, the feeling of being unable to do anything, witnessing the death of young patients with the decrease in the mean age, and the infection of co-workers, caused helplessness, fear, and anxiety in intensive care nurses. In our study, nurses described the pandemic process as the fear of infecting their families and the fear of seeing their loved ones in the intensive care unit. In the study of Galehdar et al. (2021), nurses stated that when a patient could not breathe when they had a heart attack and when they suffered in front of their eyes, they could not do anything, and this made them feel very helpless. They said they would not forget this helplessness for the rest of their lives (17). As in our study, some studies have shown that the most frequent emotion experienced by nurses during the pandemic was the fear of being infected and infecting their families (14, 17, 19). As a result of their qualitative study,

Catania et al. (2021) described the situation of nurses who had to provide care for their teammates who were in serious condition as a tragic picture (30). The nurses who participated in our study stated that similar to the current literature, the pandemic process often left them in despair; they were very afraid of infecting their relatives and that it would be a great trauma for them to see a family member or teammate in the intensive care unit. It will be important to adopt and implement policies to protect the mental health of nurses in controlling the pandemic and maintaining care in this process.

In this study, one of the topics that COVID-19 intensive care nurses complained about and were disappointed most about was the lack of management support. Nurses stated that the hospital management did not adequately support them during the pandemic; on the contrary, their job was underestimated, their thoughts were not given importance, and they were exposed to constant mobbing. They stated that all of these were as important a challenge as fighting the virus. This situation made the nurses feel worthless. In addition to the lack of moral support, they received quite low economic support compared to physicians. The reasons for the lack of support included unpreparedness for the process as well as seeing the labor and work of nurses as unimportant. However, nurses have been the leading fighters of the pandemic in this process. The fact that nurses could not find the support they expected from the hospital management significantly increased their stress and anxiety levels and decreased their motivation to work. The pandemic has been an important process in terms of revealing the administrative inadequacies in the health system. In this sense, health institutions and policymakers need to make self-criticism and arrangements for employee satisfaction and crisis management. These regulations are expected to increase the motivation of employees, to show a fair approach between the personnel, and to improve income levels and working hours.

Nurses in Turkey have two expectations in these difficult working conditions. One of them is moral support, and the other is financial support. In our study, nurses stated that although they did their best in difficult working conditions, they were not supported by the management, but they received social support. The appreciation of their labor by society has made nurses feel psychologically well. However, the fact that their efforts and performances have not been supported financially, despite being under a lot of overtime and heavy workload in difficult conditions, has disappointed them and reduced their motivation. Incidents of violence in health, working overtime despite flexible working practices in other sectors, exposure to discrimination among other occupational groups and even among healthcare professionals, and the fact that their voice is not heard in public have deeply upset nurses.

Similarly, nurses stated in a study that their voice was not heard enough, physicians were given priority, and they did not get enough material and moral support (21). Nurses in our country and worldwide expect improvements in their professional and social rights, to be valued and appreciated as a nurse, to be considered a respected professional group, and to receive the financial gain they deserve in return for their efforts. It is thought that meeting these expectations promptly will increase professional commitment and employee motivation.

Limitations

Due to the nature of qualitative research, the findings from this study cannot be generalized to other settings and healthcare professionals. The nurses participating in this study work in a hospital located in the Central Anatolia Region of Turkey. Another limitation is that the majority of the research population consists of female participants. This situation represents the gender

distribution in the nursing profession of the country. One of the strengths of the research was data collection and analysis by different researchers, which helped avoid bias. In addition, the fact that the institution where the research was conducted had a large patient capacity and served as a pandemic hospital clearly revealed the nurses' experiences in the research.

Conclusion

In this study, 6 main categories were determined. These categories are (1) challenging working conditions, (2) tiredness, (3) isolation and loneliness, (4) fear and helplessness, (5) lack of management support, and (6) expectations and needs. When the findings obtained in the main categories and sub-categories were analyzed and interpreted, very important and useful results were obtained. It was determined that nurses working in COVID-19 intensive care units in Turkey were physically and psychologically worn out under challenging working conditions, they experienced long-term chronic fatigue, they had to stay away from their families and their environment for a long time, they were excluded due to being seen as a source of contamination, they experienced fear of losing the people they provided care for and infecting their families with the virus, they could not get the financial and moral support that they expected from the hospital management despite all these experiences, but that they gained the appreciation of the society.

This study focuses on the physical, psychological, and social effects of the pandemic on nurses working in the intensive care unit. It is extremely important to improve the financial and moral support to be provided by the management in this process. Given the declining job satisfaction and feelings of inadequacy reported by nurses, fair reward mechanisms must be in place to acknowledge nurses' contributions to the management of this pandemic. It is recommended to determine the needs of nurses to make them feel good and to organize motivational meetings as well as in-service training programs. It should consider short-term and long-term plans to meet the ever-changing demands of healthcare systems for the nursing workforce. Evidence-based policies should be developed, and relevant training added to the nursing curriculum to prepare nurses to manage a future pandemic or health crisis.

Policymakers and managers should try to reduce the pandemic's physical, psychological, and social effects on nurses by focusing on their experiences and taking appropriate measures. Also, developing nurses' leadership qualities and taking an active role as policymakers in times of crisis will be effective in the management of processes.

Acknowledgments

The authors would like to acknowledge all nurses who participated in this study.

Conflicts of interest

The authors declare no conflict of interest.

References

1. World Health Organization W. Weekly epidemiological update on COVID-19 - 22 February 2022 2022 [Available from: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---22-february-2022
2. Hoogendoorn M, Brinkman S, Bosman R, Haringman J, de Keizer N, Spijkstra J. The impact of COVID-19 on nursing workload and planning of nursing staff on the Intensive Care: A prospective descriptive multicenter study. International Journal of Nursing Studies. 2021;121:104005.
3. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. Factors associated with mental health outcomes among health care workers exposed

to coronavirus disease 2019. JAMA Network open. 2020;3(3):e203976-e.

4. Liang Y, Chen M, Zheng X, Liu J. Screening for Chinese medical staff mental health by SDS and SAS during the outbreak of COVID-19. Journal of Psychosomatic Research. 2020;133:110102.

5. Grasselli G, Pesenti A, Cecconi M. Critical care utilization for the COVID-19 outbreak in Lombardy, Italy: Early experience and forecast during an emergency response. JAMA Network Open. 2020;323(16):1545-6.

6. Sugg HV, Russell A-M, Morgan LM, Iles-Smith H, Richards DA, Morley N, et al. Fundamental nursing care in patients with the SARS-CoV-2 virus: results from the 'COVID-NURSE'mixed methods survey into nurses' experiences of missed care and barriers to care. BMC Nursing. 2021;20:1-17.

7. Fernandez R, Lord H, Halcomb E, Moxham L, Middleton R, Alananzeh I, et al. Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. International Journal of Nursing Studies. 2020;111:103637.

8. Mortensen CB, Zachodnik J, Caspersen SF, Geisler A. Healthcare professionals' experiences during the initial stage of the COVID-19 pandemic in the intensive care unit: A qualitative study. Intensive Critical Care Nursing. 2022;68:103130.

9. Crowe S, Howard AF, Vanderspank-Wright B, Gillis P, McLeod F, Penner C, et al. The effect of COVID-19 pandemic on the mental health of Canadian critical care nurses providing patient care during the early phase pandemic: A mixed method study. Intensive and Critical Care Nursing. 2021;63:102999.

10. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care. 2007;19(6):349-57.

11. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101.

12. Speziale HS, Streubert HJ, Carpenter DR. Qualitative research in nursing: Advancing the humanistic imperative: Lippincott Williams & Wilkins; 2011.

13. Lucchini A, Giani M, Elli S, Villa S, Rona R, Foti G. Nursing Activities Score is increased in COVID-19 patients. Intensive Critical Care Nursing. 2020;59:102876.

14. Sezgin D, Dost A, Esin MN. Experiences and perceptions of Turkish intensive care nurses providing care to Covid-19 patients: A qualitative study. International Nursing Review. 2021.

15. Häussl A, Ehmann E, Pacher A, Knödl K, Huber T, Neundlinger L, et al. Psychological, physical, and social effects of the COVID-19 pandemic on hospital nurses. International Nursing Review. 2021;68(4):482-92.

16. Joo JY, Liu MF. Nurses' barriers to caring for patients with COVID-19: a qualitative systematic review. International Nursing Review. 2021;68(2):202-13.

17. Galehdar N, Toulabi T, Kamran A, Heydari H. Exploring nurses' perception of taking care of patients with coronavirus disease (COVID-19): A qualitative study. Nursing Open. 2021;8(1):171-9.

18. Gordon JM, Magbee T, Yoder LH. The experiences of critical care nurses caring for patients with COVID-19 during the 2020 pandemic: A qualitative study. Applied Nursing Research. 2021;59:151418.

19. Moradi Y, Baghaei R, Hosseingholipour K, Mollazadeh F. Challenges experienced by ICU nurses throughout the provision of care for COVID-19 patients: A qualitative study. Journal of Nursing Management. 2021;29(5):1159-68.

20. Akkuş Y, Karacan Y, Güney R, Kurt B. Experiences of nurses working with COVID-19 patients: A qualitative study. Journal of Clinical Nursing. 2021;31(9-10):1243-57.

21. American Nurses Association A. NEW Pulse of the Nation's Nurses Survey Series:

Mental Health and Wellness. (2021, October 13). Available from: https://www.nursingworld.org/ana/.
22. Giannis D, Geropoulos G, Matenoglou E, Moris D. Impact of coronavirus disease 2019 on healthcare workers: Beyond the risk of exposure. Postgraduate Medical Journal. 2021;97(1147):326-8.
23. Rossi R, Socci V, Pacitti F, Di Lorenzo G, Di Marco A, Siracusano A, et al. Mental health outcomes among frontline and second-line health care workers during the coronavirus disease 2019 (COVID-19) pandemic in Italy. JAMA Network Open. 2020;3(5):e2010185.
24. Kackin O, Ciydem E, Aci OS, Kutlu FY. Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: A qualitative study. International Journal of Social Psychiatry. 2021;67(2):158-67.
25. Kalateh Sadati A, Zarei L, Shahabi S, Heydari ST, Taheri V, Jiriaei R, et al. Nursing experiences of COVID-19 outbreak in Iran: A qualitative study. Nursing Open. 2021;8(1):72-9.
26. Kim J. Nurses' experience of middle east respiratory syndrome patients care. Journal of the Korea Academia-Industrial cooperation Society. 2017;18(10):185-96.
27. Park J-S, Lee E-H, Park N-R, Choi YH. Mental health of nurses working at a government-designated hospital during a MERS-CoV outbreak: A cross-sectional study. Archives of psychiatric nursing. 2018;32(1):2-6.
28. Al-Tammemi AaB. The battle against COVID-19 in Jordan: an early overview of the Jordanian experience. Frontiers in Public Health. 2020:188.
29. Xiang Y-T, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. The Lancet Psychiatry. 2020;7(3):228-9.
30. Catania G, Zanini M, Hayter M, Timmins F, Dasso N, Ottonello G, et al. Lessons from Italian front-line nurses' experiences during the COVID-19 pandemic: A qualitative descriptive study. Journal of Nursing Management. 2021;29(3):404-11.