

**EXPERIENCES of NURSES DIAGNOSED with COVID-19 and RECOVERED: A**

**QUALITATIVE RESEARCH**

*'Being a candle is not easy; to give light, one must first burn.'*

Mevlana Celaleddin Rumi

**Short running:**

**Fears of death and loss of nurses in pandemic**

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## ETHICAL CONSIDERATIONS

Permission was obtained from the Dicle University Non-Interventional Ethics Committee (No: 2021/42) and nurses.

### Abstract

**Aim:** To explain the feelings and experiences of nurses who survived COVID-19 in their care and recovery processes, based on Watson's Theory of Human Care.

**Background:** The COVID 19 pandemic was an extraordinary time when nurses both took care of their patients and dealt with their illness by catching the disease themselves. In this process, nurses who contracted the disease experienced the fear of transmitting the disease to their relatives.

**Method:** Qualitative descriptive research design was used in this study. The sample consists of 15 nurses selected by the convenience sampling method and diagnosed with COVID-19 and recovered. The data were collected in face-to-face interviews using the individual in-depth interview method through a semi-structured interview form. A thematic analysis was performed on the data according to the 10 carative factors of Watson's Theory of Human Caring.

**Results:** It was determined that the spiritual and professional difficulties experienced by nurses who recovered from COVID-19 during the disease and symptom management process were the fear of death, infecting their family members and losing them, and the importance of life.

**Conclusion:** It is considered that care practices based on Watson's Theory of Human Caring will be beneficial in the management of these processes.

**Implications for Nursing Management:** Nurses diagnosed with COVID 19 should be supported by the nursing management during their illness so that their negative experiences will not be repeated. Watson's Theory of Human Caring can help eliminate this sense of fear and loss.

**Keywords:** Death, Death anxiety, Recovery, COVID-19, Watson's Theory of Human Caring

## **1 INTRODUCTION**

COVID-19 outbreak has rapidly turned into a global pandemic that has affected the whole world. The heaviest burden in the fight against the COVID-19 pandemic has undoubtedly fallen on the healthcare sector. Healthcare workers and their families have been exposed to unprecedented levels of risk. The number of healthcare workers who have been caught in COVID-19 and lost their lives in the world and Turkey is increasing. The mortality rate due to COVID-19 in nurses-midwives is 0.83 per 10,000 (Turkish Medical Association [TTB], 2021). Nurses are at the forefront of the fight against COVID-19 in Turkey as well as in the world (Cerit & Uzun, 2022; Çelik et al., 2021; Çevirme & Kurt, 2020).

## **2 BACKGROUND**

One of the most significant factors that enable people to enjoy their profession and be professionally motivated is that they feel safe while performing their profession. Despite the low number of nurses per patient in Turkey and the difficult pandemic conditions, nurses perform their profession, quality nursing care, at the highest level in this difficult period (Çelik et al., 2021). However, nurses trying to fulfill their caregiving roles also face many risks related to their health during the COVID-19 pandemic (Choi et al., 2020; Huang et al., 2020). They also experience anxiety due to the possibility of being infected, of their family members becoming infected or infecting them (Smith et al., 2020). In a study, it was stated

that the COVID-19 pandemic caused anxiety, depression, insomnia and general psychological problems in healthcare workers (Que et al., 2020). In addition to these psychological problems, the COVID-19 pandemic predominantly causes death anxiety in healthcare workers (Özgüç et al., 2021). Death anxiety is an innate, life-long emotion that lies at the root of all fears and develops with the awareness that people will no longer exist and that they can lose themselves and the world. It is stated that the COVID-19 pandemic causes more death anxiety in healthcare workers (Özgüç et al., 2021).

In this period, when everyone is afraid of approaching each other, nurses will continue to do their job lovingly and touch human life (Çevirme & Kurt, 2020). As caregivers, nurses must understand the experiences, emotions, and concerns of patients diagnosed with and treated for COVID-19. Understanding what patients are going through will also increase nurses' sensitivity in caregiving. There is no qualitative study conducted with nurses who survived COVID-19 in Turkey. It is considered important to understand the feelings and experiences of COVID-19 patients to improve the quality of nursing care.

## **2.1 Theory**

### **2.1.2 Jean Watson's Theory of Human Caring**

According to Watson (2012), nursing is a person-to-person caregiving process. In this process, the individual's self-healing capacity may increase with the patient-nurse relationship, and a high level of consciousness may develop. Therefore, Watson's Theory of Human Caring (THC) can be used to strengthen the coping skills of nurses who survived COVID-19 and to facilitate their expression of feelings. Watson's caring behaviors were determined as listening carefully, making eye contact, comforting the patient, taking responsibility for the patient, being honest, touching, being sensitive, being respectful,

providing verbal assurances, being physically and mentally present, being emotionally open and accessible. In addition, caring behaviors include calling the patient by name, being person-centered, giving information, and considering cultural differences (Ozan & Okumuş, 2013; Özkan & Bilgin, 2016). Nurse managers are also recommended to create a healthy working environment for the resilience of nurses, display leadership qualities and communicate actively in crisis as in the COVID-19 pandemic (Sihvola et al. 2022), and these recommendations are compatible with Watson's care behaviors. In Watson's nursing care, love is the most important source of healing in the person-to-person care process (Watson, 2012). It is considered that the love-based interviews to be conducted in this process will contribute to the patients' ability to express themselves comfortably. This study was based on Watson's THC to explain the feelings and experiences of nurses who survived COVID-19 in their care and recovery processes.

### **3 METHOD**

#### **3.1 Design**

A qualitative descriptive research design was employed in the study.

#### **3.2 Setting and participants**

The purposive sampling method was used in sample selection. The sample included individuals who were diagnosed with COVID-19 and recovered following treatment, and voluntarily agreed to participate in the study. All three of the researchers are nurse academicians. The first researcher shared a post on her social media account (Facebook and Instagram), stating that she wanted to study the experiences of nurses who were diagnosed with COVID-19 and recovered. Nurses who responded to the call made by the researcher on Whatsapp were informed about the study and their verbal consent was obtained before the

interviews. Those who volunteered to participate in the study, and met the inclusion criteria, constitute the study group. In qualitative research, it is suggested that sampling should continue until a saturation point is reached (Holloway & Wheeler, 2002). Participants were included in the sample until the same concepts resurfaced and no new concepts emerged. This strategy resulted in 15 nurses being recruited for the sample.

### **3.3 Data collection**

Interviews were conducted on WhatsApp between December 2020 and February 2021. As it would take a lot of time and cost to conduct face-to-face in-depth interviews with participants working at different hospitals and living in different cities, interviews were carried on through WhatsApp. Since the first author had experience with qualitative research and the nurses were invited to participate in the study through the social media account of the first author, the interviews were conducted by the first author.

Data were collected with an interview form which includes questions about socio-demographic characteristics and semi-structured interview questions, presented in Table 1. Semi-structured interview questions were designed to examine the feelings and thoughts of nurses who received COVID-19 treatment and recovered in their care and recovery processes. The questions that aimed at clarification included: “Please give more details about your answer.”; “How did you feel then?”; “Can you please give an example”; and “What did you mean?” Before the initiation of the study, the semi-structured interview was tested on two nurse educators, who fulfilled inclusion criteria but did not participate in the study. All the interviews were conducted in Turkish and audio recorded. The mean duration of the interviews was 18.16 minutes (range: 11.33–25 min). Interviews were conducted at the participants’ convenience in a calm and quiet environment that would not interfere with the privacy of the participant and the interview. The data obtained were translated and back-

translated by bilingual researchers to ensure accuracy. The final English version was checked for accuracy by a native English speaker.

### **3.4 Data analysis**

The interview data were analyzed by using thematic analysis and deduction methods based on the 10 carative factors of Watson's THC (Wei & Watson, 2019). The steps described by Erlingsson and Brysiewicz (2017) were used as a guide in the analysis process. The interviews were transcribed word by word and transcriptions were read twice to determine themes and subthemes. The data were decoded using a computer in two days. The data analysis was performed by two researchers independently. Then, the analyzes were confirmed by another academic nurse who was competent in qualitative analysis. No computer program was used for analysis. The interviews were coded according to the concepts in the statements of the nurses. Subsequently, a thematic analysis was performed based on the 10 carative factors of Watson's THC. Watson's 10 carative factors are (1) formation of a humanistic-altruistic system of values, (2) installation of faith-hope, (3) cultivation of sensitivity to one's self and to others, (4) development of a helping-trusting, human-caring relationship, (5) promotion and acceptance of the expression of positive and negative feelings, (6) systematic use of a creative problem-solving, caring process, (7) promotion of transpersonal teaching-learning, (8) provision for a supportive, protective, and/or corrective mental, physical, societal, and spiritual environment, (9) assistance with the gratification of human needs, and (10) allowance for existential-phenomenological-spiritual forces.

### **3.5 Trustworthiness**

To achieve the trustworthiness of the qualitative data, credibility, dependability, confirmability, and transferability were adopted (Houghton et al., 2015). To enhance the

credibility of the data, the researchers transcribed audio recordings two days after the interviews. In case of incomprehensible or confusing expressions, the participants were called and asked to confirm what they wanted to express. Regarding the conformability of the data, transcriptions and emerging themes were sent to the participants, and they were asked to provide feedback on what they said during the interviews so that their experiences could be accurately captured.

### **3.6 Ethical Considerations**

Permission was obtained from the Dicle University Non-Interventional Ethics Committee (No:2021/42) and participant nurses.

## **4 FINDINGS**

The mean age of the participants was 27.6 years (range: 23-39 years). All of the participants had a bachelor's degree in nursing, 10 of them were married, 11 of them thought that they had contracted COVID-19 from the hospital where they worked, and 5 of them stated that they had transmitted COVID-19 to their families. Most of the nurses who survived COVID-19 stated that they experienced negative emotions such as anxiety and paranoia. They stated that although they experienced negative emotions in this process, having had the disease had positive effects both on them and their profession.

### **4.1 Carative Factor-1: Humanistic-altruistic system of values**

Most of the nurses participating in the study stated that their relatives, such as friends, family, and neighbors, keep to a distance because they were afraid of being infected with COVID-19. However, they also stated that it was normal for people around them to behave in this way and that they thought these people were right.



“...since we are healthcare workers, people around us look at us with fearful eyes, thinking we can spread the disease. I think they are right because most people consider it that way and are afraid of it. Everyone would think like that. As a health worker, I did not meet with anyone, either.” [Nurse-6]

“When I told my roommate the news... She stayed away... I was excluded... I mean, she saw me as a disgusting substance that no one would like to approach... I mean... I felt very bad ... It was how I felt then...” [Nurse-11]

#### **4.2 Carative Factor-2: Enabling faith-hope**

Some nurses who survived COVID-19 stated that they felt afraid during the disease process, lost their faith and hope, and even thought of quitting the profession.

“Even if you test positive, you start work after the 10th day. I started working on shift every other day as of the 11th day. Even when I was so tired, I was constantly working on shift. I had a lot of resentment towards my profession then.” [Nurse-7]

“Actually, I remembered why I became a nurse. While everyone was at home during this period, we were working under all conditions. Once again, we realized that it is a difficult profession. I mean, we are at work, working, in war, in sickness, and all conditions.” [Nurse-3]

Some nurses who survived COVID-19 stated that they lost their faith and hope and became alienated from the profession because they were not supported by society and health authorities.

“I didn't want to work, frankly, I said, "This is too much"” I consider the patients there as my parents. But after a while, you get so tired. There is no place to sit there. We are out of breath

when we put on our overalls. We sweat. Well, I am not expecting a return, but at least I would like to be called by the superiors who work there, or I would like to be called not only by my friends but also by the nurse in charge, the head nurse, frankly. I would like them to call and ask me how I am, whether I am dead or alive or if anything has happened to me.”

[Nurse-4]

“I love this job, and therefore I can still do it. I mean, I love it. I have always wanted to be a nurse. I can't imagine myself as a teacher. I love this job. What about those who don't like it? I wonder how they manage it because even I am so angry with the system... We have too much workload. If I didn't love my job, my perspective would change completely.” [Nurse-1]

Some nurses stated that their beliefs and hopes increased after they recovered and that they could be more compassionate in caring for others.

“...In early days when I tested positive, I thought of resigning ... This process was very traumatic for us... My parents said I could quit if I was afraid of the disease... Everyone called me to tell me to be careful, not to get sick... All these were very tiring... You get bored after a while... But I am not feeling like that anymore... Now I am trying to be more useful.” [Nurse-11]

Some nurses, on the other hand, stated that their fears of COVID-19 and their anxiety about getting sick increased again after they recovered from the disease.

“I felt paranoid for some time, started listening to my body, and thought I was sick again at the slightest sign. I started to link everything to COVID-19.” [Nurse-5]

### **4.3 Carative Factor-3: Cultivation of sensitivity to the self and others**

Most of the nurses stated that they were afraid of spreading the disease to their environment (spouse, children, mother, father).

“My biggest fear was infecting my family because if my mother and father had been infected, it would have caused a lot of trouble. They have chronic diseases.” [Nurse-7]

“I infected the household. I was positive at first, and then it spread to everyone in the house, even though I isolated myself. My spouse, children, and mother were all infected. You feel bad when the children get it. You say that you will get over it somehow. My spouse is a doctor. Children get through it more easily; we know that. But although you know it, driven by the feelings of parenthood, you feel worse when you see the children like that.” [Nurse-3]

Some nurses expressed regret that the workload of the clinic fell on their colleagues when they were sick.

“We were just two people giving service to three units. My first reaction was that my colleague would be alone, so I needed to get well soon. I was worried a lot about this because my colleague was giving service to all three units alone and we were in a busy area. We feel guilty about this situation as if this is our own choice.” [Nurse-1]

### **4.4 Carative Factor-4: Helping-trusting, human care relationship**

Most of the nurses stated that the support they received from their environment (friends, family), especially from their colleagues during the disease, helped their recovery.

“I received a lot of support from my friends and colleagues in the clinic where I work... They texted, called, and asked me how I was and if I needed anything. It's nice to be remembered and called (smiled)...It makes you happy. After all, you're having hard times, and they don't

leave you alone when you need something...They make you feel like they're there. It's a great feeling." [Nurse-11]

However, some nurses stated that they got upset because they did not receive support from their circles.

"I had close friends from high school. We have a WhatsApp group. They heard that I was sick, but they did not call me because they were also busy. I reproached them. They were my old friends." [Nurse-6]

Some nurses stated that they did not receive support from their colleagues during the disease and this upset them very much.

"There were even those who worked at the same unit and never asked about my health. After my quarantine was over, I showed my reaction directly. I said that it could happen to them as well and that they did not even say 'get well soon.' It would make me happy if someone I don't like would say "get well soon". This was how I felt." [Nurse-2]

"In this process, there were people who did not call me as much as those who called and asked how I was. This made me upset. Well, I expected my nurse in charge first to call me, but she didn't. I sent a photo of my report to the nurse in charge and said I had COVID-19. She didn't even say, 'get better soon.' I felt a little angry. I also shared it with my friends. It made me upset. Frankly, I got a little angry." [Nurse-4]

#### **4.5 Carative Factor-5: Expression of positive and negative feelings**

Most of the nurses stated that they experienced negative feelings due to the symptoms of the disease.

“My process as a patient was bad; I was unable to speak at all. I have asthma. I couldn't talk. I had respiratory distress when I lay down. When I tried to sit, I could not sit because my bones hurt. I was suffering. That's why I couldn't talk to anyone for the first 2-3 days. I was only able to text my friends to say ‘I am OK.’ That was my situation.” [Nurse-1]

“I felt bad psychologically. Especially when I had respiratory distress on the 4th day, it scared me a lot. And I was staying alone... I was having trouble breathing. Since I knew the process, something bad could happen suddenly, if it progressed. I would need oxygen or other procedures. These thoughts scared me a lot.” [Nurse-9]

Most of the nurses stated that they experienced fear of death.

“I had a bit of a fear of death as I had two friends who died in the intensive care unit. I didn't know them much, but they had chronic asthma. They both died, and it affected me a lot. They were young, and they were both nurses.” [Nurse-4]

“I said, ‘I guess I'll be hospitalized in the service’ because I was felt so bad. I had a lot of pain. So I was very afraid that something irreversible would happen. I was very afraid of becoming like the patients I provided care for.” [Nurse-4]

#### **4.6 Carative Factor-6: Creative problem-solving caring process**

Most of the nurses stated that they were more careful than ever when they started work after getting over the disease.

“I always warn my colleagues not to think that they will not get the disease because they are protected. I tell them to be in their room in isolation, even while drinking tea, and not to take off their masks. Everyone has a feeling of being very comfortable around their friends. We

thought it would be okay because we were working together, and we were infecting each other. This is wrong.” [Nurse-10]

“Certainly, the nurse will protect herself first. After that, they will do their best for the patients. We have to be very careful with this. The more we protect ourselves, the more we need to protect patients. Unfortunately, even if patients do not have COVID-19 when they come to the hospital, they can get it from us... The relatives can also be adversely affected when they accompany their patients.” [Nurse-11]

#### **4.7 Carative Factor-7: Transpersonal teaching learning**

Most of the nurses stated that they received a lot of support from nurses who survived COVID-19, like themselves, during this process, and they shared their experiences.

“Those who had recovered from COVID-19 before told us how they survived the process. They supported me and heartened me. They told me what to do and the process of the disease, and they said that sometimes I would feel good and sometimes bad. They said that I would also have a cough. Of course, I started coughing, as well.” [Nurse-4]

Most of the nurses stated that they experienced a lot of things during the disease. They stated that their feelings of empathy improved and they understood their patients more.

“After going through this process, I understood patients’ condition better. When patients said they had pain, I did not know what kind of pain it was. They said they had a cough, and I did not know what the cough was like and what it felt like. Now, I know better what that pain, shortness of breath, and cough are and how it feels. I started to approach patients more clemently.” [Nurse-8]

#### **4.8 Carative Factor-8: Supportive, protective, and/or corrective mental, social, spiritual environment**

Some nurses stated that they were upset because they had become sick even though they had been very careful and protected themselves.

“I had been paying so much attention that I thought I would never get COVID-19. I lamented myself, wondering where I made the mistake. I mean, I was a little angry with myself. Frankly, I was upset.” [Nurse-7]

Nurses stated that when they felt good, they tried to spend their quarantine period well.

“I was at home. I read books. I watched TV. I tried to have a good time...” [Nurse-11]

“We have been working under very harsh conditions for a very long time. That ten-day rest made me happy.” [Nurse-8]

#### **4.9 Carative Factor-9: Human needs assistance**

Most of the nurses stated that their nutrition deteriorated during this process and they lost appetite.

“I lost appetite; I couldn't eat for 4 days. I did not eat at all for 4 days. I only took liquid while taking medicine. I could not consume anything other than that. I couldn't eat anything. I lost 6 kilos in a week.” [Nurse-9]

Most of the nurses stated that their needs were met by the people in their circles. Those whose needs were not met stated that they had a worse experience in this process.

“My neighbor called us a lot. They brought food. These things make you happy when you are sick. Even people whom I didn't expect brought food to my house.” [Nurse-3]

#### **4.10 Carative Factor-10: Existential-phenomenological-Spiritual forces**

Nurses stated that the recovery process helped them strengthen themselves spiritually and professionally and that they prayed a lot for their colleagues during this process.

“After COVID-19, I realized that I needed to value myself a little more. I understood the meaning of life. Everything is a breath away from us.” [Nurse-7]

“Now that I have recovered from that disease, I'm less frightened, and I'm better. I will never have this experience again. We do not only care for intubated patients in the intensive care unit. Some patients are extubated and monitored only with a mask. I will always remember the look of the fear of death in their eyes and then the joy of being saved when the doctor comes and says they are leaving the intensive care unit and going to the clinic. Even if I forget everything in the future, I will never forget this.” [Nurse-4]

### **5 DISCUSSIONS**

In this study, the experiences of nurses who survived COVID-19 were examined based on Watson's THC. The themes of the study were created in line with the healing processes specified in the theory. In this study, the experiences of nurses who survived COVID-19, such as fear of death, fear of infecting their loved ones and losing them, the importance of life to them, and their experiences and symptom management during this process were explained in line with the THC. The THC includes the concepts of love, empathy, and care between the nurse and the patient. In this study, it was observed that when nurses were infected with COVID-19, they expressed fear of dying and being like the patients they cared for and lost. Nurses stated that when they recovered and started to work again, their feelings of empathy



developed and they understood better what they went through while providing care for patients.

### **5.1 Carative Factor-1: Humanistic-altruistic system of values**

Humanistic-altruistic values include the concepts of love, kindness, caring, forgiveness, empathy, and ethics (Boz, 2020; Durgun-Ozan, 2020). In this study, most of the nurses stated that they were excluded from their social circles due to the fear of contamination. However, in this process, they stated that when they empathized with the people in their social environment, the people around them excluded them for fear of contagion, so they could understand these behaviors of the people around them. As stated in the literature, nurses stayed away from their social circles during the pandemic (Hiçdurmaz & Üzar-Özçetin, 2020). This study had determined that although the nurses try to normalize this process, empathized with their social circle, and tried to understand them, they experienced emotional traumas. Because the nurse is also an individual, has humanistic-altruistic values, and needs to be supported psychologically.

### **5.2 Carative Factor-2: Enabling faith-hope**

This process, which aims to facilitate the improvement of positive health perception in patients with a holistic approach, includes the concepts of belief, hope, and respect for individual beliefs (Boz, 2020; Durgun-Ozan, 2020).

Some nurses stated that they were frightened during the illness, lost their faith and hope, and even thought of quitting the profession. Others stated that they since they were not supported by society and health authorities, they lost their faith and hope and became alienated from the profession. Some nurses, on the other hand, stated that after recovery, their fear of COVID-19 and fear of getting sick again increased. More nurses are needed in clinics

that care for COVID-19 patients. As the number of infected nurses increases during the pandemic, the workload of other nurses increases. Increasing workload also causes nurses to work longer and experience burnout (Hiçdurmaz & Üzar-Özçetin, 2020). In this study, it was found that the increased workload caused the nurses to alienate from the profession and lose their faith and hope. Nursing managers need to develop methods that will strengthen both the social and professional communication of clinical nurses in situations such as pandemics (Labrague, 2021). With these methods, the hope and belief of nurses working in COVID-19 clinics can be increased in tiring and worry-provoking situations such as pandemics. One of the significant results of our study that will contribute to the literature is that some nurses stated that their beliefs and hopes increase after recovery and that they believe they will be more beneficial. Some of the nurses consider this experience as an opportunity to understand and empathize with patients. Thus, they stated that they could be more beneficial to patients in the process.

### **5.3 Carative Factor-3: Cultivation of sensitivity to the self and others**

This process allows nurses to recognize their emotions and realize themselves. When nurses accept their feelings and thoughts, they will be more realistic, more authentic, and more sensitive to others (Boz, 2020; Durgun-Ozan, 2020).

In this study, most of the nurses stated that they experienced the fear of infecting the people in their environment (such as spouses, children, mothers, fathers, neighbors, and friends). Nurses are human beings, too. They are someone's spouse, child, mother, father, relative, and friend. They experience anxiety because of the possibility that their family members can get infected as well as themselves and that they can spread the virus to them (Smith et al., 2020; Buheji & Buhaid, 2020).

Another significant result of our study that will contribute to the literature is that some nurses with COVID-19 are upset because the workload of the clinic falls on their colleagues while they are in quarantine. Nurses developed sensitivity towards their social circles and colleagues during the pandemic. In addition to experiencing primary traumatic stress, they witnessed the experiences of patients they care for or colleagues they work with, such as getting infected, suffering, grief, and difficulties due to the pandemic (Figley, 2002; Figley, 1995). This indirect exposure can cause a condition called secondary traumatic stress, which can lead to some responses that are similar to post-traumatic stress symptoms.

#### **5.4 Carative Factor-4: Helping-trusting, human care relationship**

Watson emphasizes that it is very essential to develop a helpful and reassuring care relationship between the nurse and the patient. Such a relationship can be achieved when there is harmony, empathy, and effective and warm communication. To achieve this, Baskin and Barlett (2021) suggest increasing the resilience of nurses, preventing anxiety and depression, and thereby improving patient care outcomes.

In this study, most of the nurses stated that the support that they received from their environment (friends, family), especially from their colleagues, helped their recovery. It can be stated that there is a helpful and reassuring care relationship between nurses and their environment (Köksal & Durgun, 2022). However, nurses who did not receive support from their circles and colleagues stated that they were upset during this process. Based on this result, it can be suggested that the helping and reassuring care relationship is effective on the healing of people, and the establishment of assistance systems and peer support systems for the team that will enable the nurses to cope with the process (Maben & Bridges, 2020; Hiçdurmaz&Üzar-Özçetin, 2020).

### **5.5 Carative Factor-5: Expression of positive and negative feelings**

According to Watson, sharing emotions is a risk-taking experience for the nurse and the patient. The nurse should be prepared for positive or negative emotions that may arise in any interaction with the patient (Boz, 2020; Durgun-Ozan, 2020).

Most of the nurses stated that they experienced fear of death and negative feelings toward the symptoms of the disease. It was stated in the literature that nurses working during the COVID-19 pandemic may be exposed to trauma primarily due to the infection of themselves, their family members or colleagues, or the death of family members and colleagues (Jun, et al., 2020; Fang et al., 2020). Labrague (2021) recommends that hospital and nursing managers develop coping skills, encourage social support, and lead and offer a flexible working environment to protect the mental health of healthcare professionals and maintain their psychological resilience during the pandemic. These recommendations also support our study findings.

### **5.6 Carative Factor 6-8: Creative problem-solving caring process- Supportive, protective, and/or corrective mental, social, spiritual environment**

The carative problem-solving caring process covers the concepts of problem-solving, intuition, creativity, ways of knowing, the art of caring-healing, and the nursing process. Most of the nurses stated that they needed to be more careful when they started work after getting over this disease.

The process of supportive, protective, and/or corrective mental, social, and spiritual environment includes the concepts of curative environment, comfort, security, cleanliness, privacy, dignity, aesthetics, and environment. In this study, nurses stated that although they created protective environments for themselves, they contracted the virus and that they

created a healing environment for themselves to spend their quarantine period well and to recover. They also used the quarantine period as an opportunity to rest, as they were already working in very harsh conditions.

It is emphasized in the literature that preventive measures are very significant in the prevention of disease and transmission (Kiyat, 2020). In this study, nurses stated that as a result of this experience, their awareness of the importance of disease prevention and protective measures increased.

### **5.7 Carative Factor 7: Transpersonal teaching-learning**

This process includes learning and teaching opportunities according to the individual's needs and level of understanding. In the current study, most of the nurses stated that they received a lot of support from nurses who survived COVID-19 like themselves and shared their experiences in this process. It is stated in the literature that psychosocial support should be provided to reduce the anxiety of nurses during the COVID-19 pandemic. In this process, stress management skills should be developed, social support systems should be maintained and improved by establishing relationships with loved ones (Chen et al., 2020). Some studies have shown that it is significant to create opportunities for team members to support each other socially in crises such as the COVID-19 pandemic (Point of Care Foundation, 2020). The most important recommendation in this regard; The positive developments and experiences of nurses during this difficult period, the positive results that come with supporting people who have pain and difficulties due to illness, are should frequently express to each other and congratulate each other (Maben & Bridges, 2020). There was a mutual learning and teaching process between the nurses who participated in our study and the nurses who had survived the disease before, and this process contributed to the improvement of nurses. Nurses who survived Covid-19 also stated that they gained a lot of experience

during the disease, which helped them develop feelings of empathy and understand their patients better.

### **5.8 Carative Factor-9: Human needs assistance**

During this process, nutrition, excretion, and respiration are low-level bio-physical requirements, while activity, rest, and sexuality are viewed as low-level psycho-physical needs. In this study, most of the nurses stated that their nutrition was disturbed in this process, they experienced a loss of appetite, and their needs were met by people in their environment. Those whose needs were not met stated that they had hard times in this process. Nurses stated that they had difficulties in meeting their nutritional needs and that they received support from their environment during this process. However, those who could not receive support due to the fear of contamination and those who were alone survived the process worse.

### **5.9 Carative Factor-10: Existential-phenomenological-Spiritual forces**

This process covers the concepts of belief in miracles and mysteries and spiritual development. It is believed that there is a divine existence relationship between the universe and humanity. In our study, most of the nurses stated that the disease process enabled them to become stronger both spiritually and professionally. Also, they stated that they prayed a lot for their colleagues during this process. It is stated in the literature that the COVID-19 pandemic increases death anxiety (Özgüç et al., 2021). In our study, nurses stated that after they recovered, they understood better the fear of death experienced by their patients.

## **6 CONCLUSION**

During the COVID-19 pandemic, nurses in Turkey experienced increased death anxiety, fear of death and fear of losing their relatives, and had to be separated from their families for a

long time to avoid contamination. Despite to these negativities, Turkish nurses who had COVID-19 realized their professional strength and felt strong in this process. As a result of this study, it is recommended that the human needs of nurses who survived COVID-19 and whose physical and psychological needs have been satisfied should be met. These nurses' fears for themselves and their family members should be relieved, and their feelings of loneliness should be relieved by supporting them more.

## **7 IMPLICATION for NURSING MANAGEMENT**

Nursing managers have a great deal of responsibility in alleviating the fears about the health status of nurses who have COVID-19 while working during the pandemic. The institutions they work with have a key role in meeting their basic needs so that they can recover. Nurses, who are at the forefront of the fight against the pandemic and concerned about the health of both themselves and their relatives, should be made to feel important by their managers to prevent them from experiencing disillusionment and burnout. Responsibilities of executive nurses in the COVID-19 outbreak need to include; paying attention to nurse workload, suitable physical conditions, adequate equipment, development and career planning, social rights, occupational health and safety, team cooperation, communication, appreciation and recognition, effective management and leadership (Duygulu et al., 2020). In this study, nurses expected their managers to fulfill these responsibilities during illness processes. Nurses stated that they were upset when their expectations were not met. In line with these results, it can be recommended that executive nurses should communicate (phone calls, correspondence, etc) more with nurses with COVID-19, show a supportive attitude, and enable nurses to share their feelings such as fear and anxiety.

Qualitative studies, by their nature, cannot be generalized to the population. The sample size is considered adequate when it reaches saturation, that is, the data starts to repeat itself. Accordingly, conducting quantitative studies with larger samples is recommended.

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## Table 1

### Questions in the semi-structured interviews

- What was your experience as a nurse with being a COVID-19 patient?
- How do you feel as a nurse who was diagnosed with COVID-19 and recovered?
- Who did you receive the most support from during this process?
- What are your expectations from healthcare professionals (especially nurses) in this process?
- What was the most upsetting event for you in this process?
- What were you most afraid of during this process?
- What were the things that motivated you most during this process?
- As a nurse who has survived this process, how do you think your experiences will affect your future professional life?