



## Original Article

# An analysis of COVID-19 disease perceptions and metaphors of nurses working in COVID-19 intensive care units

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### Abstract

**Objectives:** Coronavirus disease 2019 (COVID-19) is seen not only as a disease, but it is also defined by a series of metaphors: mysterious, evil, an invisible enemy, an insidious danger, and a democratic virus. This study was conducted to analyze the nurses' perceptions of COVID-19 through metaphors.

**Methods:** This qualitative research was planned as a descriptive phenomenological approach. Twenty-eight nurses working in the COVID-19 intensive care unit (ICU) participated in the study. The metaphor-based data collection process was carried out with five open-ended questions. The data were analyzed through a thematic analysis. The Consolidated Criteria for Reporting Qualitative Research Checklist was used to analyze this study.

**Results:** Most military and fatigue related to the time nurses work in intensive care; Hero and nightmare of patient care with COVID-19; distance and restlessness in family relationships; their mental health darkroom and fatigue; COVID-19 as an insidious enemy and infinity. A total of 128 metaphors were produced.

**Conclusion:** Working during the COVID-19 epidemic, COVID-19 ICU nurses exhibit unfavorable approaches toward their jobs, family relationships, and mental health. Improving the working conditions of ICU nurses and considering their desires will help contribute to a favorable direction.

**Keywords:** Coronavirus; COVID-19; family relations; intensive care unit; mental health; metaphor; nurses; nursing care.

### What is presently known on this subject?

- Nurses working in the COVID-19 intensive care unit (ICU) during the pandemic are often described using metaphors, e. g., as heroes working on the front lines, and making evaluations on their psychological resilience.

### What does this article add to the existing knowledge?

- This research may have more significant implications for a better understanding of disease metaphors and for setting goals for healthcare delivery and clinical care strategies.

### What are the implications for practice?

- This qualitative research aims to reveal COVID-19 ICU nurses' perceptions of the pandemic through metaphors. In this way, nurses can be better understood and supported physically and psychosocially. In addition, identifying metaphors will help nurses create more efficient and healthy working environments, support inpatient care, and help institutions determine strategies.

Coronavirus disease 2019 (COVID-19), which emerged in China in late 2019, is one of the most pressing health problems worldwide.<sup>[1]</sup> About 220 countries have been affected by the COVID-19 pandemic, and the pandemic continues to emerge as one of the most significant challenges facing health services worldwide.<sup>[2]</sup> Thus, understanding how health-care workers are dealing with COVID-19 is critical to understanding meaningful progress.

Nurses working in the COVID-19 intensive care units (ICUs) of hospitals treat people who have potentially life-threatening symptoms of COVID-19. COVID-19 ICU nurses are at risk of exposure to the disease because of the possible transmission through family and patient care in challenging and sometimes critical situations. In addition, nurses face unprecedented

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challenges, which include limited resources and a severe lack of personal protective equipment (PPE) to care for patients.<sup>[1]</sup> In conjunction with the current situation, the current high level of work-related stress or burnout among nurses has led to an increased workload due to the increasing number of intensive care beds in hospitals to meet the needs of patients.<sup>[3]</sup> In this context, the World Health Organization declared 2021 as the International Year of Health and Care Workers and called for supporting, protecting, motivating, and equipping health-care workers.<sup>[2]</sup>

During the pandemic, a shortage of nurses had led to longer working hours inwards, all while wearing PPE, which leads to dehydration and discomfort.<sup>[4]</sup> Based on all these experiences, nurses' increased mental or physical fatigue and stress levels negatively affect their work performance and quality of care.<sup>[5,6]</sup>

Considering that the International Council of Nurses has recognized the primary role of nurses in the fight against COVID-19, he stated that it is crucial to improve the mental health of nurses to control the pandemic.<sup>[7]</sup> Studies in the literature have made some suggestions to improve the current status of nurses. These primarily include developing national strategies and therapeutic or coping modes that can have a positive impact independently or in combination, which include achieving work-life balance, deep breathing exercises, promoting awareness, and supporting others whenever possible.<sup>[8,9]</sup>

In addition, nurses' concretization of their experiences and emotions using metaphors can be a facilitative strategy for understanding them. Metaphors associate a concept with an image of a familiar situation, represent complex realities, illuminate aspects of phenomena not previously perceived, and deepen understanding.<sup>[10]</sup> In addition, metaphors uncover essential clues to nurses' needs by embodying their thoughts about patient care. Thus, metaphors created by nurses can contribute to the application and development of recommendations.<sup>[11]</sup>

COVID-19 is seen not only as a disease, but it is also defined by a series of metaphors: mysterious, evil, an invisible enemy, an insidious danger, and a democratic virus. These metaphors help explain the fight against COVID-19. Metaphors such as "invisible enemy" and "biological war" cause the fight to convert to military terminology.<sup>[12]</sup> In this context, healthcare workers are defined as the "white army," nurses who come into contact with patients are referred to as the "soldiers at the forefront of confrontation," medical masks are considered "weapons," and healing is "a victory for the patient and a defeat for the disease." In these metaphors, healthcare workers are transformed into "soldiers" who are "sent" by countries to "attack" areas of disease. Due to the daily and repeated use of violent metaphors to express the COVID-19 epidemic, sudden illness has become part of everyday discourse.<sup>[13]</sup> Humanity's experience of the coronavirus thus far is that of a sudden, unknown, and relentless aggressor, and COVID-19 is armed through health care and science. Nurses are at the

forefront of providing care to those who fall ill because of the disease, and this frontline position has been described as the "most extreme of circumstances."<sup>[14]</sup> By using military metaphors to describe this experience and relating care to war, the aim is to initiate a particular active response. Metaphors create a shift in professional practice by transforming nurses into soldiers and healing, aid, and health support into military careers. "This shift undermines the professional spirit of healthcare businesses and pushes them to become part of a larger war machine than serving citizens."<sup>[15]</sup> One of the consequences of using military metaphors is that the disease becomes the center of attention rather than the actual patient.<sup>[16]</sup> In other words, they claim that military metaphors place undue emphasis on the physical and biological aspects while downplaying, if not ignoring, the psychological, spiritual, communal, and social dimensions of illness and healing. As a result, nurses, doctors, and society in general are hindered in their work of caring for people who are suffering.<sup>[17]</sup> Nie et al.<sup>[18]</sup> concluded that these metaphors should either be radically reinterpreted or replaced with metaphors that emphasize peace, healing, and coexistence with the disease. Also, the same study showed that war metaphors should be avoided to avoid their adverse effects. This approach moves beyond military metaphors in medicine. One solution to avoid the pitfalls already described would be to transform or redeem military metaphors in medicine by attributing new and positive meanings to them. A second potential remedy, which has been previously called for by others,<sup>[19,20]</sup> is to develop and put into use realistic and "peaceful," if not pacifist, alternatives to problematic military metaphors. These new metaphors would ideally serve the same variable functions as their military counterparts while avoiding negative connotations and other potentially deleterious effects.<sup>[18]</sup> Khan et al.<sup>[21]</sup> stated that using militaristic metaphors in their study can be dangerous for healthcare professionals and patients, so it is crucial to analyze and change this language. Careful consideration must be given to the language and symbolism employed in medical research and patient care since these metaphors hold the potential to create either hope or despair. In this context, policy advocates, patients, and health professionals, especially the public, will change the perception of the war metaphor.

Studies in the literature that do not refer to war metaphors show that the pandemic process negatively affects nurses with feelings of uncertainty, anxiety, fear, loneliness, and hopelessness.<sup>[22-24]</sup> These results indicate that COVID-19 addresses many feelings, thoughts, and intentions as a metaphor for war. These indicators in society have increased curiosity about nurses' thoughts and perceptions of COVID-19, its psychological state, and its impact on family and professional life. In this regard, studies in the literature stated that ICUs and ICU nurses faced various difficulties due to being in a stressful situation because they had never experienced the COVID-19 pandemic before.<sup>[25-28]</sup> In a study by Sun et al.,<sup>[25]</sup> they found that nurses caring for patients with COVID-19 re-

ported different psychological problems, including fatigue, discomfort, and helplessness due to the heavy workload during their shifts. Studies that directly examine the difficulties and experiences of ICU nurses in their care of patients with COVID-19 are lacking in the literature. The study of Shen et al.,<sup>[26]</sup> which deals with patient care indirectly, revealed that ICU nurses have to face several difficulties, including working in an unfamiliar environment, a lack of experience in caring for infectious patients, anxiety about being infected, a heavy workload, extreme exhaustion, and depression due to failure to treat critically ill patients. Furthermore, studies in the literature stated that the work of ICU nurses during the pandemic also affected family life due to the possibility of transmitting COVID-19 as well as limited contact with family members.<sup>[27-28]</sup>

This study aims to identify ICU nurses' metaphors regarding their professional experiences, family relationships, and mental health during the COVID-19 pandemic, with the primary purpose of revealing the impact of their perceptions of COVID-19 through these metaphors. In this way, nurses can be better understood and supported physically and psychosocially. In addition, determining metaphors will help nurses create more efficient and healthier work environments, support inpatient care, and help institutions determine strategies. The focus of COVID-19 metaphors on a single subject in the literature and further studies are still insufficient. For this reason, the research aims to present a holistic view by addressing the issues related to the professional life, family relationship, and mental state of nurses.

## Materials and Method

### Study Design

This qualitative research was planned as a descriptive phenomenological approach, investigating nurses' perceptions of COVID-19 through metaphors. This study was conducted in three level 3 ICUs of a hospital that serves a population of almost 130,000 people in Ankara. Both ICUs contained 22 beds. The nurse-to-patient ratio varied between 1:2 and 1:3. The Consolidated Criteria for Reporting Qualitative Research Checklist was used to ensure adequate reporting<sup>[29]</sup> (Fig. 1).

- "During the COVID-19 process working as an ICU nurse is like ..... because ".....".
- Caring for the intensive care patient diagnosed with COVID-19 is like.....; because .....
- "During the COVID-19 pandemic process, my family relationships are like ..... because ".....".
- "During the COVID-19 pandemic process, my mental health is like ..... because ".....".
- "Coronavirus is like ..... because ".....".

**Figure 1.** Questionnaire form

### Setting Sample

The inclusion criteria were as follows: working as a bedside nurse in the hospital ICU, agreeing to participate in the study, and willingness to produce metaphors. The exclusion criterion was a lack of an email address. The researchers contacted the nurse in charge of the ICU by phone, and the form containing the contact information was sent to the nurse via WhatsApp. The contact information of 30 people who agreed to participate in the study was conveyed by the nurse in charge to the researchers. However, two nurses did not continue participating in the research because they became ill after agreeing to join. Therefore, only 28 nurses completed the form.

### Data Collection

Research data were collected between December 2020 and February 2021. The metaphor-based data collection process was carried out with five open-ended questions. Due to the safety measures, the researchers sent a questionnaire to the nurses via Google Docs. After analyzing the raw data, blank questions, and twice-submitted answers were removed.

The researchers prepared the questionnaire following a thorough literature search.<sup>[30,31]</sup> The first part contains information about the nurses' demographic characteristics, age, gender, education, and COVID-19 diagnosis status.

In the second part, nurses filled in the blanks in Figure 1 to determine the metaphorical sense: before asking to complete the survey, explanations and examples about the metaphor phenomenon were given to help nurses produce metaphors and activate their metaphor perceptions. The nurses responded to the metaphors they generated by using the notion of "because," as thematic analysis determines the metaphors' purpose.

### Data Analysis

Thematic analysis based on the phenomenology method was used for qualitative data analysis.<sup>[32]</sup> A six-stage thematic analysis approach (the content of the data drove the analysis) was followed.<sup>[33]</sup> First, the lead and second authors familiarized themselves with the data by reading all the transcripts of the interviews. Second, initial line-by-line coding of all transcripts was conducted using MAXQDA 2020 and Microsoft Word. Third, codes that shared a unifying feature were collapsed and clustered into themes. Fourth, a joint meeting was held with the third author, who has qualitative research experience, to check for ambiguous themes and compare the core themes with the transcripts, field notes, and literature to ensure accuracy. Here an independent researcher (EG) checked the themes developed against codes and the entire dataset to check if there was enough data to support the themes and to determine the quality of each theme. This process resulted in the amalgamation of some themes into one coherent theme. Fifth, themes were provided with labels and definitions. Sixth, the research team interpreted the themes in light of the research question.

IBM-SPSS version 25.0 was used for data analysis. First, numbers and percentages were used to analyze descriptive characteristics (IBM Corp., Armonk, NY, USA). Then, descriptive statistical analyses were conducted on the data and interpreted.

### Rigor and Trustworthiness

Two researchers interpreted the data in detail during the study to ensure scientific rigor and phenomenological validity in reflectivity, dependability, and transferability. As we developed the themes we obtained, we examined the following questions<sup>[34]</sup> (Fig. 2).

Credibility was achieved through data analysis, the extraction of data, the views expressed by some participants and those involved in a qualitative study on the interview texts and extracted codes, and the recruitment of ICU nurses (as participants) from the health center providing care to patients with COVID-19.

Moreover, to ensure the credibility and rigor of translated quotations, two bilingual researchers separately translated the Turkish text into English. A native English translator, who had a Ph.D., was consulted to ensure proper translation of English terminologies into Turkish.

Regarding confirmability, all activities were accurately recorded, including study stages and how data were collected. The study stages, including data collection, data analysis, and theme formation, were fully explained to enable reader scrutiny.

To assess dependability, another external audit was used to assess the similarities and differences in the understanding of the issues between that of external auditors and researchers.

For transferability, the researcher tried to fully explain the context in which the study was conducted by providing an accurate description of the participants, sampling method, and time and place of data collection so that the reader could have a favorable view of data transferability.

### Ethical Approval

Ethical approval for this study was obtained from the Ethics Committee for Non-Interventional Studies of a government university (no. 2020-396) and the Ministry of Health (14T16\_22\_33). A sentence on voluntary informed consent

1. Is the analysis presented thoroughly?
2. Is it clear how themes were derived from the data?
3. Is the analytical process and themes presented demonstrated with quotes?
4. Are the findings presented in a logical way, relevant and meaningful, and contribute new knowledge?
5. Have researchers critically reflected on the process and examined their role and influence during the analysis?
6. Overall, the process of analysis can be complex, and the researcher needs to be flexible.
7. Has the analysis and findings been reviewed by all researchers?

**Figure 2.** Sundler AJ, Lindberg E, Nilsson C, Palmér L. Qualitative thematic analysis based on descriptive phenomenology.

was added at the beginning of the survey, and participants that did not give voluntary informed consent were not allowed to continue the survey.

## Results

In total, 30 ICU nurses agreed to participate in the study, of whom 28 (93.3%) completed the survey. Table 1 shows the sociodemographic characteristics of the participants in this study, showing the metaphorical perceptions of ICU nurses regarding COVID-19 disease.

Within the scope of the five questions asked to the nurses, 126 metaphors related to 18 themes were determined (Table 2).

### Metaphors About Working with COVID-19

Four main themes emerged from the COVID-19 interviews, which were "war," "captivity," "despair," and "burnout."

#### War

As frontliners during the COVID-19 pandemic, ICU nurses used "soldier" and the "sneaky enemy" under the war theme.

*It looks like a soldier because wishes and feelings do not matter, there is a disease that kills humanity, and everyone expects you to work even if you are in constant contact, everyone may whine, but this has been your lofty duty, even though this is not allowed.*

*It looks like fighting an insidious enemy because we are fighting against something we cannot see.*

#### Captivity

Metaphors such as "prison," "bottom," and "isolated house" were used under the captivity theme, relating to the patient care process.

*It looks like prison because one feels like a prisoner in clothes.*

*It looks like being at the bottom of a well because no one can hear voice and effort at the bottom of that well.*

**Table 1. Characteristics of nurses**

Characteristics	n=28	%
Age	31.0±11.1 Min: 22.0 Max: 44.0	
Gender	Female Male	23 5
		82.1 17.9
Marital status	Ever married Single	15 13
		53.6 46.4
Education	University Postgraduate	23 5
		82.1 17.9
Total	28	100

**Table 2. Metaphors created by ICU nurses**

Metaphor Themes	Metaphor Name	f	%	Metaphor Themes	Metaphor Name	f	%
1. WAR	Soldier	4	16.6		Collapsed	1	3.85
	Sneaky enemy	1	4.1		A rope about to break	1	3.85
2. CAPTIVITY	Bottom	1	4.1	<b>Total</b>		26	100
	Prison	1	4.1	1. BURNOUT	Tired	2	7.41
	Isolated house	2	8.3		Anxious	1	3.70
3. DESPAIR	Raw meat	1	4.1		Rebellious artist	1	3.70
	Life-ruining	1	4.1		Depressed	5	18.52
	Death	1	4.1		Poor	1	3.70
	End of World	1	4.1		Scrap	1	3.70
	Drown in the sea	1	4.1		Schizophrenic	1	3.70
	Fair	3	12.5		Broken machine	1	3.70
	Torture	1	4.1		Antidepressant addict	1	3.70
4. BURNOUT	Fatigue	6	25.0		Collapsed	2	7.41
<b>Total</b>		24	100		Problematic	2	7.41
1. ACHIEVEMENT	Hero	2	9.52	2. OBSCURITY	Dark room	2	7.41
	Pride	2	9.52		Feather	1	3.70
	Flower	1	4.76		Mixed	1	3.70
	Friendship	1	4.76		Wavy Sea	1	3.70
2. FAIR	Grind	1	4.76		Turbid water	1	3.70
	Bell jar	1	4.76	3. UNDERVALUE/ UNDERESTIMATE	Worthless	1	3.70
	Baby-care	1	4.76		A body with dead feelings	1	3.70
	Transition between seasons	1	4.76		Worn	1	3.70
	Sieve	1	4.76	<b>Total</b>		27	100
	Panic attack	1	4.76	1. ANIMAL	Tick	1	3.57
	Nightmare	9	42.86		Dragon	1	3.57
<b>Total</b>		21	100		Scorpion	1	3.57
1. COMPLEXITY/ UNCERTAINTY	Knot	1	3.85	2. DISEASE	Plague	2	7.14
	Puzzle	1	3.85		Pandemic	1	3.57
	Confusing	1	3.85		Virus	1	3.57
2. DISTANCE	Disconnection	1	3.85		Chest pain	1	3.57
	Distance	8	30.77		Adverse effect	1	3.57
	Ice	1	3.85	3. ENEMY	Sneaky enemy	3	10.71
	Stranger	1	3.85		Saturn	1	3.57
	Broken rope	1	3.85	4. PERSECUTION	Death	2	7.14
	Movie	1	3.85		Hell	1	3.57
	A forgotten child in orphanage	1	3.85		Infinity	2	7.14
3. TOLERANCE	Same	1	3.85		Lose the taste of life	1	3.57
	Pudding	1	3.85		Tired years	1	3.57
	A tightly tied rope	1	3.85	5. WORTHLESS	Grind	3	10.71
4. INTOLERANCE	Trouble	3	11.54		Against nurses	1	3.57
	Bored	1	3.85		Money and office	1	3.57
					Justice	3	10.71
				<b>Total</b>		28	100

**Despair**

"Raw meat" and "cold" were used as metaphors under the despair theme in relation to their experiences working during the pandemic.

*It looks like raw meat because we could not digest this process.*

*It looks like getting cold from life because I have lived through despair.*

## Burnout

Nurses were working under extreme conditions defined and experienced fatigue, which they expressed as burnout.

*It looks like being tired every day and waking up fresher every morning because I tried to improve my quality of life every time I went to the hospital.*

*It looked like a bad experience because I was so tired.*

## Metaphors about Caring for a Patient with COVID-19

The metaphors for caring for patients with COVID-19 are listed under "achievement" and "fear."

### Achievement

Some nurses used metaphors successfully and proudly in the care process: "hero," "pride," "flower," and "friendship."

*It looks like be proud because we are on the front lines for the health and future of people in this process where the whole world is fighting simultaneously.*

*It looks like a flower because when the patient is healed, you see it bloom.*

### Fair

Metaphors such as "grinding," "bell jar," "baby care," "sieve," "panic attack," "hero," "friendship," "the transition between seasons," and "nightmare" were given under this theme.

*It looks like a bell jar, living in fear of being unable to go out.*

*It looks like baby care because it's like caring for sensitive bodies.*

## Metaphors about Family Relations

Themes were created to identify how nurses' family relations were affected during the COVID-19 pandemic.

### Uncertainty

In defining family relationships during the pandemic, nurses named three meaningful metaphors, "knot" and "puzzle," under the theme of uncertainty.

*It's like a knot because it gets more tangled as you try to untie it.*

*It's like a puzzle; When we say we will fully unite, we break up again, and we can never unite.*

### Distance

For family relationships during the pandemic, nurses gave 14 important metaphors under the theme of distance.

*It's like a disconnection. I can spend quality time with my loved ones neither face to face nor on the phone because of the workload.*

*It's like near but far because to protect the ones you love, and you have to stay away from them.*

## Tolerance and Intolerance

The ICU nurses gave 10 meaningful metaphors under the theme of tolerance and intolerance.

*It's like pudding; because I have a very understanding wife.*

*It is like a tightly tied rope, because we are so afraid of losing each other.*

## Metaphors about Mental Health

The ICU nurses gave 28 important metaphors for describing mental health during the pandemic.

### Burnout

The ICU nurses gave 19 important metaphors under the burn-out theme. These metaphors were "tired," "anxious," "rebellious artist," "depressed," "poor," "scrap," "schizophrenic," "broken machine," "antidepressant addict," "collapsed," and "problematic."

*It is like burnout because it is equivalent to seeing the bottom in spirit and body.*

*It is burnout because the heavy working conditions wore me out a lot.*

### Obscurity

Six important metaphors were given under the theme of obscurity.

*It's like being alone in a dark room because there's no light.*

*I'm like a feather. I can be blown anywhere in any wind whether.*

### Undervalued

Three important metaphors were given under the undervalued theme.

*Like worthless. I think we are an undervalued group in the ICU.*

*Like a body with dead feelings, there is no development in my life that will make me happy, and my mood is always wrong.*

## Metaphors about COVID-19

The ICU nurses' metaphors for the definition of COVID-19 are divided into six categories: animal, disease, enemy, persecution, and worthless.

*The coronavirus is where justice ends since it reminds me how insignificant healthcare workers are once again.*

*It's an event that serves as a reminder that money and power are meaningless. The coronavirus is similar to Saturn in that it teaches through the pounding.*

## Discussion

The purpose of this study was to use the metaphors of ICU nurses regarding their professional experiences, family rela-

tionships, and mental health during the COVID-19 pandemic. The 18 themes were determined using five open-ended questions, and under these themes, the ICU nurses gave 126 metaphors. The variety of metaphors indicates how nurses perceive the COVID-19 pandemic differently.

All four themes stated by COVID-19 ICU nurses are similar to those in the literature.<sup>[35]</sup> During the pandemic, the feelings of the ICU nurses who are on the front lines have revealed their struggle. Furthermore, the end of the COVID-19 pandemic is unclear and has left them feeling exhausted and helpless. Feelings of being stuck, caused by both ICU and pandemic conditions, triggered the nurses' sense of captivity/slavery. At first, comparing the pandemic to a war unites people against a "common enemy" and boosts morale. However, Varma says that the pandemic-war analogy is both dangerous and false.<sup>[36]</sup> Unlike war, which divides people, pandemics require a concerted, coordinated, and collective response. Nurses describe themselves as being on the front lines of war when working during the COVID-19 pandemic. According to the soldier and hero metaphors used by the nurses, they felt alone in their experience of facing the COVID-19 pandemic. These metaphors also describe their feelings of hopelessness and disappointment, when it is thought that nurses are fighting for every patient, losing their patients.<sup>[36]</sup>

These results are very concerning, especially in light of other qualitative research findings that show that nurses were extremely unprotected from psychological distress during the pandemic. Qualitative research findings have shown that the mental health of nurses is exceptionally vulnerable, as the COVID-19 pandemic is a new situation. This situation is quite worrying.<sup>[37]</sup> Neto et al.<sup>[38]</sup> stated that the COVID-19 is a source of uncertainty and can create distress, anxiety, and stress in this situation. Another psychological situation nurses face is that they feel isolated because they work in a closed environment in the ICU. At the same time, they struggled with the feeling of loneliness due to the risk of infecting their families and other people with the virus.<sup>[39]</sup> The isolated situations that nurses experience and the fact that they are on the front lines of the COVID-19 pandemic increase their stress levels. Based on the literature, nurses feel exhausted due to psychological and physical stress.<sup>[3,26]</sup> Unfortunately, these study results are not surprising.

In the analysis, nurses defined COVID patient care with success and fear metaphors. The fact that ICU nurses are on the front lines suggests that they see themselves as heroes or close friends of the patient.<sup>[40]</sup> The media's portrayal of healthcare workers as heroes at the beginning of the pandemic contributed to this view of nurses. However, it was also emphasized that due to the uncertainty of the COVID-19 treatment process, nurses experienced feelings such as increased anxiety, stress, fear, burnout, and inadequacy.<sup>[22-24]</sup> In the study, because nurses, on the theme of fear, saw the pandemic as a long and never-ending process, they also associated caring for patients with COVID-19 with the metaphor of sifting flour.

In addition, the nurses stated that they feel like they are in a glass bell while giving care to patients because they cannot go out due to quarantine and overtime. Considering these metaphors, the emotional state of nurses is important, especially in caring for patients with COVID-19, because it is inevitable for nurses with a high emotional state to have a high quality of care.

ICU nurses, who are at the forefront of treating and caring for a newly defined disease, face many problems when working.<sup>[13,14]</sup> One of these problems is family relations. The COVID-19 pandemic caused critical changes in the family lives of ICU nurses.<sup>[41]</sup> The researchers noted that healthcare workers who were mindful of their families' health during the pandemic performed better inpatient care.<sup>[41]</sup> The ICU nurses, who felt the support of the family even from afar, used the metaphor of pudding because of their tolerance and softness. Another nurse said that everyone in the family bonded more because of the fear of losing each other.

On the other hand, it has been stated that the mental problems of nurses due to the pandemic affect family relations negatively.<sup>[27]</sup> With the concept of quarantine that emerged during the pandemic, social distancing, wearing masks, and staying away from each other to minimize transmission have entered our lives. Although "distance" is used in the physical sense, it has psychologically affected nurses. Such physical distances cause nurses to feel lonely, as well as minimize communication, causing the person to experience emotional processes, such as stress and depression.<sup>[42]</sup> From the metaphors produced by ICU nurses, it was evident that the COVID-19 work process was complicated to maintain, so their family relationships included unsafe, intolerant experiences. Nurses' inability to touch their families, communicate adequately, and fulfill their family responsibilities is considered one reason for this situation.<sup>[42]</sup> Therefore, health managers should recognize nurses' feelings, motivational resources, and essential needs and create support for their continued well-being.<sup>[43,44]</sup> Considering the data, it seems to conclude that was limited literature about establishing strong family relationships between nurses and their families during the COVID-19 epidemic. What is novel about our research is that some ICU nurses used metaphors to feel good about their family relationships.

Throughout their working hours, the results of our study showed that ICU nurses experienced a high level of burnout, obscurity, and being undervalued. Unfortunately, during the pandemic, the ICU nurses encountered many problems, severe mental pressures (ethical problems, mobbing behaviors, and heavy responsibilities), and even psychological harm.<sup>[45,46]</sup> Research on the subject showed that nurses' satisfaction levels, workloads, and sleep disturbances were commonly implicated with mental health problems.<sup>[47-50]</sup> According to studies, more than half of ICU nurses who care for patients with a COVID-19 diagnosis report burnout. These findings demonstrate that our research aligns with the existing literature.<sup>[49,50]</sup> More than 60% of the metaphors produced by nurses include

the theme of burnout, which reveals that ICU nurses' working conditions should be improved urgently. Nurses constitute the largest group of healthcare professionals and play a vital role in the health system. The COVID-19 pandemic has presented ICU nurses with an even more remarkable, unprecedented challenge, exposing them to high-risk factors, likely having profound psychological effects. For example, ICU nurses had to deal with multiple end-of-life decisions, a shortage of ICU beds and inadequate PPE, fear of infecting themselves or others, and restrictions on family visits. In addition, we can say that media discourses, society's expectations, and government policies influence nurses' perceptions regarding COVID-19.

## Conclusion

This study presents the metaphors of ICU nurses regarding their professional experiences, family relationships, and mental health during the COVID-19 pandemic. It reveals the situations that nurses experienced during the pandemic and the issues that need to be supported by ICU nurses. As specific needs, the needs for the solution of most physical, and psychosocial problems were included.

Based on our study results, we suggest that the needs of ICU nurses be evaluated comprehensively and supported by health administrators and relevant government agencies, starting with their family, friends, and environment. In order to examine the situations experienced by ICU nurses during the pandemic, both the pandemic period and the periods in which the pandemic is alleviated should be evaluated comparatively. In addition, there is a need for more multicenter needs assessment studies involving more nurses in the sample group.

## Limitations

Although this study expanded the existing literature regarding the lived experiences of ICU nurses working during the COVID-19 pandemic, it had some limitations. First, the nurses included in this study were comprised of only a tiny number from one center. Also, since this is a qualitative study, the results cannot be generalized to all ICU nurses.

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