

Operating Room Nurses' Metaphorical Perceptions of Coronavirus Disease 2019, Quarantine, and Mask Concepts: A Qualitative Study

Ameliyathane Hemşirelerinin COVID-19, Karantina ve Maske Kavramlarına Yönelik Metaforik Algıları: Nitel Bir Çalışma

ABSTRACT

Objective: This study was conducted to reveal operating room nurses' perceptions of coronavirus disease 2019, mask use, and quarantine process through metaphors.

Methods: This descriptive qualitative study was conducted with operating room nurses (n=96). The study data were collected between September 2020 and March 2021 by using a descriptive characteristics form and a semistructured form. The operating room nurses were asked to write down what they compared the concepts of "COVID-19," "mask use" and "quarantine process" to and the reason for their metaphors. The data were analyzed by using the "content analysis" method.

Results: A total of 181 metaphors were produced about the 3 different concepts in the study. The metaphors about the concept of "COVID-19" were grouped into 3 categories as "transmission mutation," "harmful," and "coping and adjustment process." The metaphors about the concept of "quarantine process" were classified into 2 categories as "restriction of freedom" and "process of change." The metaphors about "mask use" were grouped into 3 categories as "positive aspects," "negative aspects," and "both positive and negative aspects."

Conclusion: This study shows that nurses working in operating rooms focus on the positive aspects of this process as well as the difficulties they have experienced during the pandemic.

Keywords: COVID-19, mask, metaphor, operating room nurses, quarantine

öz

Amaç: Bu çalışmanın amacı ameliyathane hemşirelerinin COVID-19, maske kullanımı ve karantina sürecine ilişkin algılarını, metaforlar aracılığıyla ortaya çıkarmaktır.

Yöntemler: Bu tanımlayıcı kalitatif çalışma ameliyathane hemşireleri ile yapılmıştır (n=96). Çalışma verileri tanıtıcı özellikler formu ve yarı yapılandırılmış form kullanılarak Eylül 2020-Mart 2021 tarihleri arasında toplanmıştır. Ameliyathane hemşirelerinden "COVID-19", "maske kullanımı" ve "karantina süreci" kavramlarını neye benzettiklerini, benzetme nedeniyle birlikte yazması istenmiştir. Veriler, "içerik analizi" yöntemiyle incelenmiştir.

Bulgular: Araştırmadaki üç farklı kavrama ilişkin toplam 181 metafor üretilmiştir. "COVID-19" kavramına ilişkin benzetmeler "Kontaminasyon ve mutasyon," "Zarar verici" ve "Başetme ve uyum süreci" olarak üç kategoride toplanmıştır. "Karantina süreci" kavramına ilişkin benzetmeler "Özgürlüğün Kısıtlaması" ve "Değişim Süreci" olarak iki kategoride toplanmıştır. "Maske kullanımı" kavramına ilişkin benzetmeler ise "olumlu yönleri," "olumsuz yönleri" ve "hem olumlu hem de olumsuz" olarak üç kategoride toplanmıştır.

Sonuç: Bu çalışma ameliyathanelerde çalışan hemşirelerin pandemide yaşadıkları zorlukların yanı sıra bu sürecin olumlu yönlerine de odaklandığını göstermektedir.

Anahtar Kelimeler: COVID-19, maske, metafor, ameliyathane hemşireleri, karantina

Adile SAVSAR¹ Hale TURHAN DAMAR² Filiz ÖĞCE AKTAŞ¹

¹Department of Nursing, Faculty of Health Science, Izmir University of Economics, Izmir, Turkey ²Elderly Care Program, Vocational School of Health Services, Izmir Democracy University, Izmir, Turkey



Geliş Tarihi/Received: 07.02.2023 Kabul Tarihi/Accepted: 14.07.2023 Yayın Tarihi/Publication Date: 04.09.2023

Sorumlu Yazar/Corresponding Author: Adile SAVSAR E-mail: adilesavsar17@gmail.com

Cite this article as: Savsar A, Turhan Damar H, Öğce Aktaş F. Operating room nurses' metaphorical perceptions of Coronavirus Diseases 2019, quarantine, and mask concepts: A qualitative study. *J Nursology* 2023;26(3):167-174.



Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has been continuing to spread rapidly throughout the world since it emerged in Wuhan, China.¹ The first COVID-19 case in Turkey was reported on March 10, 2020, and related data are updated daily. As of January 2023, there were 101 492 deaths and 17 042 722 diagnosed cases in Turkey.²

In addition to the operation of infected and possible COVID-19 cases and the use of high-risk equipment (surgical instruments, gases, and the like), operating rooms pose a high risk for COVID-19 infection as the working space is closed and narrow.^{3,4} Aerosols produced in many surgical procedures and during the use of electrical devices increase the risk for viral contamination. Therefore, the surgical team needs to plan and implement COVID-19 precautions, such as the use of personal protective equipment, patient's preparation and transport for surgery, type of surgery (open, closed), type of anesthesia, and management of gases during surgery.⁵

The World Health Organization (WHO) recommends 5 main personal protective measures against COVID-19. These are hand hygiene; social distancing; avoiding touching the eyes, nose, and mouth; airborne precautions; and self-isolation.¹ Although using a mask for a health-care worker means reducing the risk of contracting COVID-19, as well as reducing fear and anxiety, in the studies conducted, the measures such as social distance and masks have been reported to trigger psychological problems such as depression and burnout and physiological problems such as fatigue and sweating.⁶⁷ It is thought that the quarantine processes experienced in the COVID-19 pandemic may also cause psychological and emotional problems in many people.⁸ Each obligation added to the list during the COVID-19 pandemic negatively affects many health-care professionals psychologically and physiologically.^{6,9,10} Gül and Kılıç¹¹ reported that the decrease in the break time and the long shift hours caused anxiety during the COVID-19 pandemic due to operating room (OR) nurses who had chronic diseases, fear of contracting COVID-19 and infecting their beloved ones, inadequacy of hospitals in managing the pandemic, lack of hospital manager support, and the preventive measures taken.

Qualitative studies interpret and reflect the meanings of lived experiences as well as the participants' explanations of their experiences. Metaphors (mental images) can make it easier to comprehend the structures and abstract concepts in people's thoughts through metaphorical descriptions.¹² Metaphors are tools of thought, not objects of it. They are used to help the reader understand something by defining it as something else. In a qualitative study which was conducted with OR nurses by using the metaphor method, personal and professional difficulties experienced by nurses in organ transplantation were determined. In addition, coping methods were identified.¹³ There are studies in the literature that examine nurses' metaphorical perceptions of different concepts.¹³⁻¹⁵ In addition to these studies, there are also studies on the practices and thoughts of OR nurses about the prevention of COVID-19.7.16 However, there was no study examining the perceptions of nurses working in the operating room about the concepts related to the pandemic. How the OR nurses perceive the concepts related to the pandemic may affect patients' perioperative care. It is thought that people have different experiences regarding measures such as

personal protective equipment that all health-care personnel have to use and the quarantine in the COVID-19 pandemic and that various perspectives are formed by using these experiences. This study was conducted to reveal OR nurses' perceptions of COVID-19, mask use, and quarantine process through metaphors. It is thought that understanding the metaphors produced in this study and their reasons will contribute to the literature in terms of nurses who work in surgical units regarding their coping with the pandemic.

Research Questions

- 1. What are the OR nurses' metaphors about the concept of COVID-19?
- 2. What are the OR nurses' metaphors about the concept of mask?
- 3. What are the OR nurses' metaphors about the concept of quarantine?

METHODS

Aim

The aim of this study was to reveal the perceptions of OR nurses about COVID-19, mask use, and quarantine process through metaphors.

Study Design

This study was conducted using a descriptive qualitative research design. Throughout this study, the authors followed the Consolidated Criteria for Reporting Qualitative Research.¹⁷

Participants

The universe of the study consisted of nurses working in the ORs of hospitals in Turkey. The purposive sampling method was used in the study. The inclusion criteria of the study were being an OR nurse, being aged >18 years, and volunteering to participate in the study. The study was conducted with 114 OR nurses.

Data Collection Tools

The data collection form was designed by the researchers in 2 parts following a review of the literature on the subject. The first part was the Nurse Descriptive Information Form, which consisted of a total of 11 questions related to age, gender, educational status, marital status, total work experience, people he/she lives with, and whether he/she has given care to a patient diagnosed with COVID-19.

The second part was a semistructured form consisting of the following 3 sentences.

(i) "COVID-19 is similar to because"

(ii) "The quarantine process is similar to because"

(iii) "Using a mask is similar to because"

Data Collection

The data were collected by the researchers by using an online form between September 2020 and March 2021. Upon obtaining the permission of the Turkish Surgical and Operating Room Nurses Association, it was shared with the members of the association via social media accounts and e-mail. In the second part of the data collection form, an example was given for the participants to better understand the metaphor questions about the concepts.¹⁸ With this method, the participants were asked to write what they compared the concepts of "COVID-19," "mask use," and "quarantine process" to and the reasons for their metaphors.

Statistical Analysis

Two different methods were used for data analysis. The demographic data were analyzed by using the Statistical Package for the Social Sciences Statistics (IBM SPSS Corp., Armonk, NY, USA) v23.0 software package. The Metaphor Identification Procedure (MIP) approach, which was proposed by Pragglejaz Group,¹⁹ was employed in the analysis of the concepts in the second part. To start the analysis of the data, first, the nurses' answer sheets were checked whether they had been written appropriately. Eighteen of the 114 OR nurses (15.78%) were not included in the analysis because they answered the questions on the semistructured form incompletely. Therefore, the answer sheets were numbered from 1 to 96. The metaphor analysis, one of the data evaluation methods used in qualitative research, was used in the present study.

To get an overview of the metaphors in the MIP, all texts were read, and the metaphors used by the participants were analyzed and coded in terms of similarities and common features.¹⁹ The subjects, sources, and connections of a total of 181 metaphors created by the participants were taken into account. In the second step of the metaphor analysis, valid metaphors expressed by nurses were grouped according to their common characteristics for each of the 3 concepts (COVID-19, mask use, and quarantine process) to focus on the deeper meanings of the metaphors. Each metaphor was analyzed in terms of the subject, the subject and the source, and the connection between them. Then, conceptual categories were created. From the 181 metaphors produced by the participants, 3 categories were elicited for the concept of COVID-19, 3 for the mask use, and 2 for the guarantine process. Researchers examined the data to understand the metaphors more deeply and comprehensively.

Validity and Reliability

To achieve the validity of the study, the following 3 important processes were carried out.

- (i) Data coding and data analysis processes were explained in detail. $^{\rm 20}$
- (ii) For each of the categories obtained in the study, examples of the descriptions of the participants who were assumed to represent the category best were given in the findings section.²¹
- (iii) The literature was reviewed in detail to achieve consistency between the current research and related studies.²²

To ensure the reliability of the study, the codes and the categories related to the codes were compared to confirm whether the codes included under the categories reached in the research represented the mentioned conceptual categories. After the data were coded separately by the researchers, the resulting code and category list was finalized. The reliability of data analysis conducted in the study was calculated using the following formula: [Agreement/(Agreement+Disagreement) × 100], and the mean interrater reliability was found to be 94%.²³ On the other hand, the opinions of the nurses were highlighted in the findings section by specifying the participant number, e.g., participant 18.

Ethical Considerations

The approvals of the Health Sciences Research Ethics Committee of Izmir University of Economics (approval number: B.30. 2.IEUSB.0.05.05-20-067 and approval date: July 3, 2020), the Ministry of Health, and the Turkish Surgical and Operating Room Nurses Association were obtained to conduct the study. Information about the purpose of the study was given on the first page of the questionnaire, and only participants who submitted approval for participating in the study were allowed to access the questionnaire.

RESULTS

The mean age of the 96 OR nurses participating in the study was 35.84 ± 9.04 (minimum 21; maximum: 55) years, and the majority of them were female (91.7%). More than half of them were married (55.2%), had children (55.2%), had an undergraduate degree (53.1%), and had \leq 15 years of total work experience (54.2%). Also, 68.8% of the participants were nonsmokers, 19.8% had chronic diseases, 61.5% had given care to a patient diagnosed with COVID-19, and 81.3% were living with their family. Moreover, 54.16% of the nurses themselves or one of their family members had been diagnosed with COVID-19 (Table 1). In the study, themes were created for 3 different concepts (Table 2).

The Concept of COVID-19

In the study, 62 metaphors were determined about the concept of "COVID-19" (Table 2). It was determined that a total of 15 metaphors were repeated between 8 and 2, while 46 metaphors were repeated once. The 3 categories for the concept of "COVID-19" were harmfulness; transmission, mutation, and spread; and coping and adaptation process. Majority of the metaphors were found to concentrate under the category of "harmfulness" (33 metaphors). The 5 most frequently mentioned metaphors by the OR nurses about the concept of "COVID-19" were enemy (8.24%), disease (6.18%), monster (6.18%), war (5.15%), and Hitler (4.12%), and they were determined to be under the "harmfulness" category. Examples of these metaphors created for the concept of "COVID-19" are given below.

Category 1: Harmfulness

"It is similar to an enemy because it is invisible and evil." [Participant No. 2]

"It is similar to a war because it is a struggle and a struggle for survival." [Participant No. 5]

"It is similar to a snake because if you do not know how to approach and protect yourself, you cannot know what you will encounter." [Participant No. 8]

"It is similar to a disease because if we do not know how to cope with it, it will not leave us for life." [Participant No. 15]

"It is similar to a jackal because it's as sneaky, obtrusive, ruthless, and dangerous as a jackal." [Participant No. 23]

"It is similar to a hurricane because a hurricane destroys homes; COVID-19 separates family members." [Participant No. 63]

Category 2: Transmission, Mutation, and Spread

"It' is similar to a naughty kid because it wanders off everywhere, it spreads, and it doesn't do this consciously." [Participant No. 1]

"It is similar to ink because even when a small amount of it drips (spills), it spreads quickly and is not cleaned in any way." [Participant No. 38]

"It is similar to a flame because it will turn into a fire if it is not controlled." [Participant No. 39]

Table 1. Descriptive Characteristics of the Nurses (n = 96)				
Variables	X ± SD			
Age (years)	35.84 ± 9.04 (minimum 21; maximum: 55)			
	n (%)			
Gender				
Female	88 (8.3)			
Male	8 (91.7)			
Children				
No	45 (44.8)			
Yes	51 (55.2)			
Education status				
High school	4 (4.2)			
Associate degree	6 (6.3)			
University	51 (53.1)			
Graduate	35 (36.5)			
Marital status				
Single	43 (44.8)			
Married	53 (55.2)			
Chronic illness				
Yes	19 (19.8)			
No	77 (80.2)			
Smoking				
Yes	30 (31.3)			
No	66 (68.8)			
Working year				
1-15	52 (54.16)			
16-36	44 (45.83)			
Caring for a patient diagnosed with COVID-19				
Yes	59 (61.5)			
No	37 (38.5)			
People living with				
Family	78 (81.3)			
Friends	6 (6.8)			
Alone	12 (12.5)			
Presence of COVID-19 pat	ients in the family/at home			
Yes	17 (17.7)			
No	52 (54.16)			
COVID-19, coronavirus disease	\pm 2019; X \pm SD, Mean \pm Standard Deviation.			

"It is similar to a fly because it lands everywhere, it contaminates everything, but people ignore it because it is small and insignificant." [Participant No. 42]

"It is similar to a chameleon because it easily changes." [Participant No. 61]

"It is similar to a pair of shoes because they go everywhere we go." [Participant No. 90]

Category 3: Coping and Adaptation Process

"It is similar to a warning system because it has shown people that everything but health is meaningless." [Participant No. 50] "It is similar to a big moral because we have given so much damage to nature." [Participant No. 96]

Quarantine Process

A total of 52 metaphors related to the concept of the "quarantine process" were determined (Table 2). While 11 metaphors were repeated between 26 and 2, 41 metaphors were repeated once. Two categories were created for the concept of "quarantine process," namely, restriction of freedom and change process. The metaphors were found to concentrate under the "change process" category (29 metaphors). The 5 most frequently mentioned metaphors by the OR nurses regarding the concept of "quarantine process" included prison (27.08%), conviction (6.25%), caged bird (4.16%), seclusion (4.16%), and cage (3.12%). Examples of these metaphors created for the concept of the "quarantine process" are given below.

Category 1: Restriction of Freedom

"It is similar to a prison because you are deprived of freedom." [Participant Nos. 3, 29, 36, 48, 57, 59, 84, 85]

"It is similar to a conviction because it is a situation where you are not allowed to leave your house under any circumstances." [Participant No. 31]

"It is similar to a caged bird because we cannot do without socializing, just as birds need to fly." [Participant No. 35]

"It is similar to a cage because you want to get out but you can't and you are deprived of freedom." [Participant Nos. 42, 58]

"It is similar to a bell glass because you can see the outside but you can't get out." [Participant No. 11]

"It is similar to a deserted island because you are alone and there is no one around you." [Participant No. 19]

"It is similar to a black wool sweater because it is just as boring and dark as it is." [Participant No. 23]

Category 2: Changing

"It is similar to school because we learn many things at school, and during this quarantine period, people learned how to spend their time at home effectively." [Participant No. 14]

"It is similar to peace because everywhere is quiet and beautiful." [Participant No. 30]

"It is similar to a turtle because you need to go back into your shell to protect yourself; you have to adjust to this." [Participant No. 45]

"It is similar to discovering a talent because I have developed different handicrafts and designs in my spare time." [Participant No. 60]

"It is similar to an exam because it takes patience, effort, and struggle." [Participant No. 81]

"It is similar to the pregnancy process because the result is so nice, even if the process is painful." [Participant No. 86]

"It is similar to a vacation because there is an opportunity to rest." [Participant No. 93]

Concepts	Categories	% of Nurses	Note to Deanta: Numeric values will be centered in the table Number of Metaphors
	Harmfulness Metaphors: enemy, snake, poison, disease, beast, hedgehog, bee, tick, coyote, owl, woodworm, Hitler, war, secretion, bad temper, nightmare, our follies, murderer, trouble nightmare, gun, Internet, radiation, ghost, tornado, torture, virus, mixed, unknown, scary character, human, breathlessness, parasite	65.62 (63 nurses)	33
	Transmission and mutation, spread Metaphors: naughty boy, bird, wind, ivy, ink, fire, fly, pomegranate, intruder, natural selection, eternity, aging, chameleon, transformation-change, octopus, zombie, swamp, shoe, money	23.95 (25 nurses)	20
	Coping and adaptation process Metaphors: race, warning system, teacher of despair, a kind of protection, coal, great lesson, rough sea, human, question mark	10.41 (10 nurses)	9
process Metap shelter wool st bird in electro the vill Chang Metap looking deeds, fingerp countr medita patien	Restriction of freedom Metaphors: prison, conviction, person imprisoned in a tower, curfew, shelter, diabetic, loneliness, poverty, lantern, deserted island, a black wool sweater, dam, bird in a cage, a long road that will not end, cage, crime, nightmare, electronic handcuffs, isolation marriage of a young girl taken from the village, darkness, circle, something boring	63.54 (61 nurses)	23
	Change process Metaphors: combat technique, empty mind, school, talent discovery, looking around for appreciation, journey with no end, our good deeds, seclusion, calming yourself in a quiet place, peace, fingerprints, the process of the turtle, marathon country administration, being under protection, mountain, snake, meditative process, exam, pregnancy process, purification, struggle patience, virtue of being patient, vacation, science fiction movie, damned person, sterility, uncertainty	36.45 (35 nurses)	29
Use of masks P M s n o o s s , , s w w p P N M b b s s b w w a a fa	Positive aspects Metaphors: holding on to a branch while falling, shield, life jacket, steel vest, tire chain, safe space, friend, best friend, contraception, medication, sunscreen, using sunglasses, wearing a hat, wearing an oxygen tube and mask, our sensitivities, accessories, liberation struggle, , using the lid of the pot, taking precautions, invisibility cloak, window sill, using a napkin while sneezing, hygiene, silencer, helmet, spider web, being a parent, empowerment with armament, protection, psychological relaxation, a magic person with a hidden face	53.12 (51 nurses)	29
	Negatives aspects Metaphors: nausea, uncomfortable tights, nightmare, shortness of breath, illness, out-of-date skin product, outer space, walking in snow in winter, breathing in a bag, living in a place with no trees, being silent, a food that has no taste/dislike, neglect, prison, prisoner, wire mesh, windowless house, drowning, hypocrisy, bridle on mouth and gestures, forced things, veil, asthmatic, mummy	29.16 (28 nurses)	24
	Both positive and negative Metaphors: stinging nettle, safety and obstacle, unsweetened coffee, a horse's bait bag, a kind of punishment and warning to humanity, mother, a harmony of effort and change, a magician trying to hide his face, masquerade, loneliness, care, going into surgery, face hidden magic one, limited controlled life	17.7 (17 nurses)	14

In the study, 67 metaphors were determined about the concept of "mask use" (Table 2). While a total of 11 metaphors were repeated between 17 and 2, it was determined that 56 metaphors were repeated once. Metaphors regarding the use of masks were classified into 2 categories as positive and negative aspects. The majority of the metaphors were found to concentrate under the "positive aspects" category (29 metaphors). The 5 most frequently mentioned metaphors about the concept of "mask use" by the OR nurses were shield (17.70%), accessories (4.16%), shortness of breath (3.12%), masquerade (2.08%), and a kind of punishment and warning to humanity (2.08%). Examples of these metaphors created about the concept of "mask use" are given below.

Category 1: Positive Aspects

"It is similar to a shield because it is the most effective weapon against the invisible enemy." [Participant Nos. 5, 28, 40]

"It is similar to a life jacket because it protects me, my family, and my loved ones." [Participant No. 62]

"It is similar to sunscreen because if sunscreens protect our skin from the harmful effects of the sun, a mask also protects us from the virus that is harmful to our body." [Participant No. 14]

"It is similar to a spider web because you weave a web in your mouth and nose; the virus gets caught in this web, and it cannot get inside and is trapped there." [Participant No. 93]

Category 2: Negatives Aspects

"It is similar to shortness of breath because I cannot breathe as deeply as I want to." [Participant No. 24]

"It is similar to staying at home without a window because we cannot breathe." [Participant Nos. 88, 92]

Category 3: Both Positive and Negative

"It is similar to a nettle plant because if you touch it by mistake, it will burn your hand, and then you will die. If you use it appropriately, it will be a medicine and a cure." [Participant No. 8]

"It is similar to coffee without sugar because you have a hard time, but you are willing to drink it without sugar because sugar is harmful." [Participant No. 22]

"It is similar to a mother trying to silence our tactless words because she is always with us and never makes us forget her." [Participant No. 89]

DISCUSSION

Metaphors about the Concept of COVID-19

When the metaphors classified under the "harmfulness" subtheme about the concept of "COVID-19" were examined together with their reasons, it was found that the OR nurses perceived COVID-19 as harmful to people or the world. Similar to our study, Marron et al²⁴ stated that nurses described their experiences during the COVID-19 pandemic as a war against an enemy or as a surreal drama. There was no study in the literature examining nurses' metaphorical perceptions of COVID 19, but Pekesen and Akdeniz (2021) stated that the elderly perceived COVID-19 as seriously threatening or ending human life.²⁵ It was determined that COVID-19 caused psychological problems in nurses, such as fear, anxiety, burnout, and depression.^{9,26,27} In studies conducted with nurses, it was determined that surgical nurses had moderate fear of COVID-19 and anxiety levels.^{10,11}

Due to the highly infectious nature of the COVID-19 disease and its spread from person to person, it was declared a pandemic by the WHO on March 11, 2020.²⁵ The pandemic was still going on at the time when this study was conducted. During the ongoing surgical procedures in the pandemic, OR nurses are at risk for coming into direct contact with the blood, tissues, and body fluids of patients diagnosed with COVID-19.16 In this study, when the metaphors, such as "fly, octopus, ink, ivy, and shoes," produced by the OR nurses about the COVID-19 pandemic were analyzed with their reasons, it was determined that they associated COVID-19 with the rapid spread of the pandemic, and these metaphors were in the "transmission and mutation, spread" category. In this context, it is recommended to conduct a psychosocial assessment of OR nurses regularly, to share practical guides to help them cope with fears and worries and to direct those who need personal support.

The examination of OR nurses' reasons for the metaphors about COVID-19, such as "chameleon, aging, natural selection" indicated that they associated COVID-19 with its feature of bringing

has affected the whole world, creates an opportunity potential for positive situations described with concepts, such as change, empowerment, or posttraumatic growth, along with many negative consequences. $^{\scriptscriptstyle 28}$ Some studies have shown that effective use of coping strategies will help individuals manage stressful events and reduce negative emotions. In the literature, it is stated that nurses developed various coping strategies to combat the pandemic during the COVID-19 process.^{8,29} In this study, when metaphors, such as "churning sea, race," were examined, it was found that similar to the literature. OR nurses had developed different methods to cope with COVID-19, they were in the spirit of fighting, and that they associated it with a kind of adjustment to new conditions. Therefore, it is important to guide OR nurses to develop strong coping strategies in the COVID-19 pandemic. It is thought that if the OR nurses see the COVID-19 epidemic as an opportunity for posttraumatic growth, they may have the potential to initiate many changes for both themselves and the patients they provide care for.

about change. It is reported that the COVID-19 pandemic, which

Metaphors about the Concept of Quarantine Process

The examination of OR nurses' reasons for the metaphors about the "quarantine process" in this study, such as "prison, conviction, caged bird, bell glass" indicated that they associated the process with its feature that restricts freedom. In addition, it was seen that comparisons regarding loneliness such as "loneliness and deserted island" were made. Similar to our study, Kackin et al⁸ stated that nurses were alienated from social environments due to the risk of stigmatization by society and transmission of the disease; therefore, it was determined that they felt isolated and alone. Nurses experienced the guarantine process when they were in contact with COVID-19 or contracted the virus. They stated that it was painful to be separated from their family members or relatives during this guarantine period.²⁷ Similarly, healthcare professionals and their families struggling during the Middle East respiratory syndrome coronavirus pandemic had been stigmatized and excluded by society as potential carriers.³⁰ It was also reported that during the guarantine period, health-care personnel experienced burnout, could not fulfill their professional and family roles, experienced deterioration in their work performance, and had a desire to resign.³¹ Therefore, it was seen that the quarantine process restricted OR nurses' freedom, like everyone. In line with these results, it is thought that it is important to evaluate the social support levels of OR nurses and to strengthen team communication. In addition, some studies have shown that social isolation and quarantine processes brought about by COVID-19 have allowed family members to spend more time at home.32 Similarly, in our study, metaphors such as "holiday, retreat, peace, school" revealed that OR nurses perceived the quarantine process as a resting time and opportunity to spare time for themselves and their families during the quarantine process.

Metaphors about the Concept of Mask Use

In this study, the metaphors produced by the OR nurses about the use of masks indicated that they mostly perceived the use of masks positively. Literature has provided evidence that masks reduce the spread of droplets when worn on the nose and mouth and prevent the spread of severe acute respiratory syndrome coronavirus 2 and that universal mandatory mask-wearing policies are associated with reductions in the number/rate of infections and deaths.³³ There is evidence that supports the importance of mask use because asymptomatic individuals can accelerate the spread of COVID-19.³⁴ Health-care professionals protect both themselves and the patient with the use of masks and personal protective equipment. On the other hand, in the study conducted by Danesh et al.7 it was stated that long-term use of protective masks causes many physical ailments, such as regional sweating, headache, and skin problems due to decreased oxygenation. It has been reported that people have to use analgesics due to the headache they experience.³³ Similarly, in this study, when the metaphors produced by the OR nurses for "mask use" such as "staying at home without a window, shortness of breath, breathing in a bag, suffocation," were examined together with their reasons, it was determined that OR nurses perceived mask use both as a difficulty and as protection. In line with these results, it is thought that in addition to the health of the employees, the working efficiency of OR nurses may also be adversely affected. For this reason, it is recommended that OR nurses' work plans (case planning) should be made by considering these results.

Study Limitations

Since this research was conducted with OR nurses who are members of the social media accounts of the Turkish Surgical and Operating Room Nurses Association, the findings cannot be generalized.

In this study, metaphors used by OR nurses about COVID-19, quarantine process, and mask use were examined. COVID-19, quarantine, and mask use were described both positively and negatively. The nursing studies about COVID-19 in the literature have focused on both the psychosocial effects emerging in patients and employees and the fatal risks of COVID-19. It can be said that the findings of this study are similar to those of the literature. However, although the COVID-19 pandemic adversely affected many health-care professionals in our country and around the world, nurses in this study stated that they saw it as a process, that they were in a spirit of fighting, and that the process also had positive effects.

Ethics Committee Approval: Ethics committee approval was received for this study from Health Sciences Research Ethics Committee of Izmir University of Economics (Date: July 3, 2020, Number: B.30.2.IEUSB.0.05.05 .05-20-067).

Informed Consent: Information about the purpose of the study was given on the first page of the questionnaire, and only participants who submitted approval for participating in the study were allowed to access the questionnaire.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – A.S., H.T.D., F.Ö.A.; Design – A.S., H.T.D., F.Ö.A.; Supervision – F.Ö.A.; Resources – A.S., H.T.D., F.Ö.A.; Materials – A.S., H.T.D., F.Ö.A.; Data Collection and/or Processing – A.S., H.T.D., F.Ö.A.; Analysis and/or Interpretation – A.S., H.T.D., F.Ö.A.; Literature Search – A.S., H.T.D.; Writing Manuscript – A.S., H.T.D., F.Ö.A.; Critical Review – F.Ö.A.

Declaration of Interests: The authors declare that they have no competing interest.

Funding: The authors declared that this study has received no financial support.

Etik Komite Onayı: Bu çalışma için etik komite onayı İzmir Ekonomi Üniversitesi'nden (Tarih: 3 Temmuz 2020, Sayı: B.30.2.IEUSB.0.05.05 .05-20-067) alınmıştır.

Bilgilendirilmiş Onay: Anketin ilk sayfasında çalışmanın amacı hakkında bilgi verilmiş ve sadece araştırmaya katılmayı kabul eden katılımcıların ankete erişmesine izin verilmiştir.

Hakem Değerlendirmesi: Dış bağımsız.

Yazar Katkıları: Fikir– A.S., H.T.D., F.Ö.A.; Tasarım – A.S., H.T.D., F.Ö.A.; Denetleme – F.Ö.A.; Kaynaklar – A.S., H.T.D., F.Ö.A.; Malzemeler – A.S., H.T.D., F.Ö.A.; Veri Toplanması ve/veya İşlemesi – A.S., H.T.D., F.Ö.A.; Analiz ve/veya Yorum – A.S., H.T.D., F.Ö.A.; Literatür Taraması – A.S., H.T.D.; Yazıyı Yazan – A.S., H.T.D., F.Ö.A.; Eleştirel İnceleme – F.Ö.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

REFERENCES

- World Health Organization. Coronavirus disease 2019 (COVID-19) Situation Report; 2020. https://www.who.int/docs/default-source/ coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf. Accessed 10 December 2022.
- COVID-19 dashboard by the center for systems science and engineering (CSSE) at johns Hopkins university (JHU). https://gisanddata. maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd4 0299423467b48e9ecf6. Accessed 17 January 2023.
- Yu GY, Lou Z, Zhang W. Several suggestion of operation for colorectal cancer under the outbreak of Corona Virus Disease 19 in China. *Zhonghua Wei Chang Wai Ke Za Zhi*. 2020;23(3):9-11. [CrossRef]
- Al-Balas M, Al-Balas HI, Al-Balas H. Surgery during the COVID-19 pandemic: a comprehensive overview and perioperative care. *Am J Surg.* 2020;219(6):903-906. [CrossRef]
- Karaca AS, Ozmen MM, Uçar AD, Yasti AÇ, Demirer S. General surgery operating room practice in patients with COVID-19. *Turk J Surg.* 2020;36(1):i-v. [CrossRef]
- Luo M, Guo L, Yu M, Jiang W, Wang H. The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public- A systematic review and meta-analysis. *Psychiatry Res.* 2020;291:113190. [CrossRef]
- Danesh MK, Garosi E, Golmohamadpour H. The COVID-19 Pandemic and nursing challenges: a review of the early literature. *Work*. 2021;69(1):23-36. [CrossRef]
- 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. *Int J Soc Psychiatry*. 2021;67(2):158-167.
 [CrossRef]
- Labrague LJ, de Los Santos JAA. Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. J Nurs Manag. 2021;29(3):395-403. [CrossRef]
- Ünver S, Yenigün SC. COVID-19 Fear level of surgical nurses working in pandemic and surgical units. *J Perianesth Nurs*. 2021;36(6):711-716. [CrossRef]
- 11. Gül Ş, Kılıç ST. Determining anxiety levels and related factors in operating room nurses during the COVID-19 pandemic: a descriptive study. *J Nurs Manag.* 2021;29(7):1934-1945. [CrossRef]
- 12. Cerit Y. Students, teachers and administrators' views on metaphors with respect to the concept of principal. *Educ Sci.* 2008;33(147).
- Gao W, Plummer V, McKenna L. Using metaphor method to interpret and understand meanings of international operating room nurses' experiences in organ procurement surgery. *J Clin Nurs*. 2020;29(23-24):4604-4613. [CrossRef]
- 14. Kale E, Çiçek Ü. Metaphor perceptions of nurses about their own profession. *J Health Nurs Manag.* 2015;3(2).
- Ingebretsen LP, Sagbakken M. Hospice nurses' emotional challenges in their encounters with the dying. *Int J Qual Stud Health Well Being*. 2016;11:31170. [CrossRef]
- Gümüs K, Basgün A. Evaluation of the knowledge of operating room nurses of preventive practices for protection against COVID-19. J Perianesth Nurs. 2021;36(3):300-304. [CrossRef]
- 17. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. [CrossRef]

- Balcı Akpınar R, Ipek Coban G. Analysis of nursing students' perceptions through metaphors for nurse and patient concepts. *J Nursol*ogy. 2022;25(4):238-244. [CrossRef]
- 19. MIP PG. A Method for identifying metaphorically used words in discourse. *Metaphor Symbol*. 2007;22:1-39.
- Hruschka DJ, Schwartz D, St John DC, Picone-Decaro E, Jenkins RA, Carey JW. Reliability in coding open-ended data: lessons learned from HIV behavioral research. *Field Methods*. 2004;16(3):307-331.
 [CrossRef]
- Yıldırım A, Şimşek H. Qualitative Research Methods in Social Sciences. 9th ed. Ankara: Seçkin Publishing; 2013.
- 22. Leung L. Validity, reliability, and generalizability in qualitative research. *J Fam Med Prim Care*. 2015;4(3):324-327. [CrossRef]
- Miles MB, Huberman AM. Qualitative Data Analysis: an Expanded Sourcebook. 2nd ed. Sage Publications, Inc; 1994.
- Marron JM, Dizon DS, Symington B, Thompson MA, Rosenberg AR. Waging war on war metaphors in cancer and COVID-19. JCO Oncol Pract. 2020;16(10):624-627. [CrossRef]
- Pekesen M, Akdeniz Ş. COVID-19 COVID-19 metaphors: A qualitative study on elderly individuals in the COVID-19 pandemic. *Opus Int J* Soc Res. 2021;18(43):6394-6424.
- García-Reyna B, Castillo-García GD, Barbosa-Camacho FJ, et al. Fear of COVID-19 scale for hospital staff in regional hospitals in Mexico: A brief report [published online ahead of print, 2020 Nov 4] [published correction appears in Int J Ment Health Addict. 2021 Jan 27;1]. Int J Ment Health Addict. 2020:1-12.
- 27. Karimi Z, Fereidouni Z, Behnammoghadam M, et al. The lived experience of nurses caring for patients with COVID-19 in Iran:

A phenomenological study. *Risk Manag Healthc Policy*. 2020;13: 1271-1278. [CrossRef]

- Polizzi C, Lynn SJ, Perry A. Perry A. Stress and coping in the time of Covid-19: pathways to resilience and recovery. *Clin Neuropsychiatry*. 2020;17(2):59-62. [CrossRef]
- Sun N, Wei L, Shi S, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control.* 2020;48(6):592-598. [CrossRef]
- Kim Y. Nurses' experiences of care for patients with Middle East respiratory syndrome-coronavirus in South Korea. Am J Infect Control. 2018;46(7):781-787. [CrossRef]
- Brooks SK, Dunn R, Amlôt R, Rubin GJ, Greenberg N. A Systematic, thematic review of social and occupational factors associated with psychological outcomes in healthcare employees during an infectious disease outbreak. J Occup Environ Med. 2018;60(3):248-257. [CrossRef]
- Zeybek Z, Bozkurt Y, Aşkın R. Covid-19 pandemic: psychological effects and Therapeutic Interventions. *Istanbul Commerce Univer*sity Journal of Social Sciences Covid-19 Social Sciences Special Issue. 2020:304-318.
- Bundgaard H, Bundgaard JS, Raaschou-Pedersen DET, et al. Effectiveness of adding a mask recommendation to other public health measures to prevent SARS-CoV-2 infection in Danish mask wearers: A randomized controlled trial. Ann Intern Med. 2021;174(3):335-343.
 [CrossRef]
- Samannan R, Holt G, Calderon-Candelario R, Mirsaeidi M, Campos M. Effect of face masks on gas exchange in healthy persons and patients with chronic obstructive pulmonary disease. *Ann Am Thorac Soc.* 2021;18(3):541-544. [CrossRef]