Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Original Article

The Experiences of Individuals Experiencing Pain During COVID-19 Infection: A Phenomenological Study

Sevda Korkut, Ph.D., R.N.[1], Türkan Ülker, M.Sc., R.N.

Department of Nursing, Faculty of Health Sciences, Erciyes University, Kayseri, Turkey

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ABSTRACT

Aim: This research was conducted to determine the pain experience of individuals who experience pain during COVID-19 infection.
Method: The research was carried out with the phenomenological qualitative design, and was completed with 15 participants. The data of the study were collected with the descriptive characteristics form, a semi-structured interview form about pain experienced during COVID-19 infection and Numeric Rating Scale. Descriptive and content analysis methods were used in the evaluation of qualitative data.
Results: The data of the research were examined in 6 themes: 1) "pain from the perspective of participants"; 2) "characteristics of pain experienced during COVID-19 infection"; 3) "the effect of pain experienced during COVID-19 infection on daily life"; 4) "management of pain experienced during COVID-19 infection"; 5) "fear of re-experiencing the pain experienced during COVID-19 infection"; and 6) "metaphors for pain experienced during COVID-19 infection".
Conclusions: Participants generally defined pain as a feeling that hurts and causes people to suffer. The participants used many methods to relieve the intense pain they experienced. However, nearly half of the participants stated that their pain did not completely disappear despite the many methods they used. The approximately two-thirds of the participants were afraid of re-experiencing this pain. For effective pain management, it is important to define the pain behaviors of the patients correctly, to determine the opinions of the patients about the pain, and to evaluate the effects of the pain experienced.

Pain is a complex, multidimensional, neurophysiological, and psychosocial experience known only to the person experiencing it (Potter et al., 2021). Many definitions of pain, which is a universal concept, have been made for centuries. Pain is expressed as "An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage" in the definition of the International Association for the Study of Pain, updated in 2020 (Raja et al., 2020). As can be understood from its definition, pain is a subjective experience. For this reason, the person's self-report of pain represents the most valid measure for the presence of pain, and it should be obtained whenever possible (Kozier et al., 2018).

The attempt to understand pain represents one of the oldest challenges in the history of medicine. Pain is a symptom related to the health status of the individual and therefore serves as a meaningful tool. But as John J Bonica noted in 1953, when pain becomes persistent in its late stages, it no longer serves a useful purpose and then becomes a destructive force with mental and physical effects. Pain, which acts as a biologic protective tool, may lose its adaptive function in such conditions and become a pathologic condition, seriously affecting the individual's quality of life (Raffaeli & Arnaudo, 2017).

It has been reported that in cases where the measures for pain are insufficient and the pain of patients cannot be relieved, the quality of life of the individuals decreases, their daily living activities and social interactions are impaired, the length of hospital stay is prolonged, and the mortality rates increase (Dikmen & Ziyai, 2021). Pain can have negative effects on the psychological state of patients as well as their physical activity. This process, which seems to be a simple situation, is actually very complex and pain relief is the basic requirement of patients (Chou et al., 2016; Meulders & Bennett, 2018). The affective and emotional complexity of pain also causes clinical difficulties in pain management in many areas. The individual's perception of pain is not only affected by the intensity of the stimulus, but also by the individual's age, gender, culture, personality traits, personal interpretation of pain, and other psychosocial factors (Dikmen & Ziyai, 2021). Subjective experiences as pain are strongly influenced by individual experiences in the previous period of life (Michaelides & Zis, 2019). Un-

[1] Address correspondence to Sevda Korkut, Ph.D., R.N., Department of Nursing, Faculty of Health Sciences, Erciyes University, Kayseri, Turkey
E-mail address: skorkut@erciyes.edu.tr (S. Korkut).

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fortunately, past experiences with pain could create fear of pain over time (Meulders & Bennett, 2018; Racine et al., 2012). Fear of pain may result from a negative interpretation of pain and may result in more damage than the pain itself (Wang et al., 2018).

The COVID-19 virus, which first appeared in Wuhan, China, in December 2019 (Huang et al., 2020) and spread rapidly around the World (Velavan & Meyer, 2020), could cause different pain symptoms by invading different tissues of the body (Weng et al., 2021). The virus not only invades the respiratory system, but also causes individuals to experience many pain symptoms such as headache, dizziness, abdominal pain, chest pain, and muscle-joint pain (Weng et al., 2021). In recent studies, the presence of pain in individuals with COVID-19 has been revealed, but how this pain affects the individual and how individuals cope with pain have not been evaluated. This research was conducted to determine the pain experience of individuals who experience pain during COVID-19 infection. The researchers sought to answer the following research questions:

- What are the opinions of individuals regarding the pain experienced during COVID-19 infection?
- How did the pain experienced during the COVID-19 infection affect individuals?
- What are metaphors of individuals for the pain experienced during COVID-19 infection?

Method

Study Design

This research was carried out with the phenomenology design, which is one of the qualitative research methods. Phenomenological studies aim to reveal the experiences of persons about the phenomena and how persons make sense of the experience (Creswell, 2007). The purpose of using this method in this research is to describe the meaning of pain experienced during COVID-19 infection in regards to what was experienced, how it was experienced, and how it affects the person.

Participants

The participants were individuals who experienced pain during COVID-19 infection. The purposive sampling method was used for sample selection. Primary participants were chosen from among individuals who were known to the researchers. Following recruitment of primary participants in the study, other participants were reached by the snowball sampling method.

Inclusion criteria were as follows: (1) individuals aged >18; (2) who can speak and understand Turkish; (3) who had experienced COVID-19 infection; (4) who experienced pain during the COVID-19 infection; and (5) volunteered to participate in the study.

Because this study was qualitative research, a specific sample size was not required. It is thought that data saturation is reached when new participants included in the sample of qualitative research repeat the previously mentioned concepts before new themes emerge (Kyngäs et al., 2019; Sandelowski, 1995). For this reason, when similar concepts and expressions started to be repeated, it was accepted that data saturation was reached and the sampling was terminated. Finally, the study was completed with 15 participants.

Data Collection Tools

A descriptive characteristics form, a semi-structured interview form about pain experienced during COVID-19 infection, and Numeric Rating Scale (NRS) were used to collect research data.

Table 1
The Form of Opinions on the Pain Experienced by Individuals During the COVID-19 Infection

1. What is pain according to you?
2. In which part of your body did you experience pain during COVID-19? What characteristics did this pain have?
3. When did this pain start and how long did it last, does it still continue?
4. How did the pain you experienced during the COVID-19 affect your daily life?
5. Are you afraid of experiencing these pains again after COVID-19? Could you explain why?
6. "The pain I experienced during the COVID-19 infection is like..... Because....."
7. What did you do to relieve this pain you experienced during COVID-19?
8. Do you think that the interventions you make are sufficient to reduce or relieve your pain? Please, explain with reasons.

In the descriptive characteristics form, there are questions about participants' age, gender, educational status, employment status, chronic diseases, and COVID-19 infection.

The semi-structured interview form about pain experienced during COVID-19 infection contains 8 open-ended questions about the pain experienced and how this pain affects the individual (Table 1). While developing the questions in the form, first a conceptual framework such as pain, pain in infectious diseases, pain in COVID-19, types of pain, duration of pain, management of pain, effects of pain was created about the subject and then questions were created. The process of conceptual framework development is one in which factors that relate to the issue are identified, and the relationship between these factors and important targets for interventions is identified (Merlin et al., 2014). After the questions were formed, feedback was received from three academicians who are expert in their field and have qualitative research experience, and the questions were finalized.

NRS is a 10-centimeter scale in which 0 represents no pain and 10 severe pain. Duncan et al. (1989), Paice and Cohen (1997), and Seymour (1982) supported the validity and reliability of the NRS. It has been used in studies to assess the intensity of pain perceived subjectively.

Data Collection

Due to the high risk of transmission of COVID-19, video and audio interview method was preferred. The study data were collected by researchers via telephone interviews with participants in April 2021. The interviews were moderated by the first author. While the first author conducted the interview, the second author captured the participants' expressions. Both authors have qualitative research experience. The first author has >1 published qualitative research article, and the second author has 1 published article. Each interview lasted an average of 30 minutes. In the interviews, questions in the semi-structured interview form were used for opinions on pain experienced during COVID-19 infection. First of all, the purpose of the study was explained to the participants and it was explained that their names would not be used anywhere. Individuals who wanted to participate in the study were asked to sign the informed consent form and send it to the researchers. After the consent, interviews were held at times convenient for the individual and the researchers. During the interviews, participants were asked questions about descriptive characteristics. Afterwards, individuals were asked for their views on pain experi-

Table 2
Introductory Characteristics of the Participants

Paticipants	Age	Gender	Education	Professional status	Working year	Time to have COVID-19	Hospitalization	Chronic disease	Pain severity according to NRS
P1	36	Male	University	Yes	10 year	7 months ago	No	No	6
P2	31	Female	High school	No	-	13 months ago	No	Yes	10
P3	37	Male	University	Yes	13 year	10 months ago	Yes	Yes	8
P4	31	Female	High school	No	-	6 months ago	No	Yes	10
P5	23	Female	University	No	-	5 months ago	No	No	7
P6	31	Male	University	Yes	6 year	3 months ago	No	No	8
P7	31	Female	Master	Yes	1 year	1 month ago	No	Yes	3
P8	31	Female	University	Yes	8 year	5 months ago	No	No	7
P9	33	Male	Master	Yes	1 year 5 months	8 months ago	No	No	6
P10	40	Female	University	Yes	10 year	8 months ago	No	No	8
P11	58	Male	Primary school	Yes	3 year	8 months ago	Yes	No	6
P12	32	Female	University	Yes	10 year	8 months ago	No	No	8
P13	28	Male	Master	Yes	4 year	7 months ago	No	No	9
P14	25	Female	Primary school	No	-	9 months ago	Yes	Yes	10
P15	43	Female	University	No	-	5 months ago	No	No	10

NRS = Numerical Rating Scale.

enced during COVID-19 infection. When the data started to repeat, the interviews were terminated and the data collection phase was completed. The statements from each participant in the interview were written separately and sent back to them for checking. The participants were asked if there was any information they would like to add or remove. In this study, the Consolidated Criteria for Reporting Qualitative Research (COREQ) guideline was followed.

Data Analysis

Descriptive and content analysis methods were used in the evaluation of qualitative data. All written interviews were reviewed by the researchers. While the expressions of the individuals were written, the participants were coded by giving numbers. All written interviews were read several times to gain an understanding of meanings conveyed. Then, significant phrases identified, open coding were done, categories and themes created. Both researchers created themes independent of each other. In the independent evaluation, it was observed that the researchers reached similar results. In addition, for the content analysis, the opinions of three academicians who are experts in their fields were taken and the themes and sub-themes were finalized. Number and percentage data were used in the presentation of the descriptive characteristic.

Ethical Considerations

This research was conducted in accordance with the Declaration of Helsinki. Approval was obtained from the Ministry of Health Scientific Research Platform (2021-03-08T20_51_04) and the University Ethics Committee (2021/171) to conduct the study. The purpose of the research was explained to the participants, they were informed about the research, and their consents were obtained.

Results

The study data were used to determine the experiences of individuals regarding pain experienced during COVID-19 infection and were categorized and examined in six themes. Table 2 includes the introductory characteristics of the participants such as age, gender, working status, the time they had COVID-19 infection, and the severity of the pain they experienced during the infection. The mean age of the participants was 34.0 ± 8.42 and 60% of them were female, the majority of them had a university education and were working. The vast majority have no chronic disease and only 20% of the participants were hospitalized at the time of COVID-19 infection.

Theme 1. Pain from the Perspective of Participants

Participants generally described pain as a distressing emotion, feeling, neural transmission, or reaction of the body that hurts, disturbs, causes suffering, and negatively affects daily life activities and social relations. Two sub-themes emerged in this theme.

Sub-theme I: A damaging effect and suffering.

Many of the participants stated that pain is a damaging feeling and causes people to suffer: "It is a distressing feeling caused by damaging stimuli in any part of the body" (P1).

In addition, while one participant described pain as being isolated from the world, another participant described pain as wanting the aching part of the body to disappear.

- "To suffer. Being isolated from the world" (P15).
- "To suffer, to want the aching part of the body to disappear" (P10).

One participant compared the pain to fluttering in water and stated that pain could cause death: "I think it's like struggling to avoid drowning in water. You struggle not to suffocate, but in the end you may die (P5).

Sub-theme II: A condition that negatively affects activities of daily living.

Some participants explained pain as a condition that negatively affects their daily living activities. Some participants said that they could not forget the pain they experienced even if they were busy with other things. They stated that the pain they experienced disrupted their lives and reduced their comfort of life.

- "In my opinion, pain is a signal that does not make you forget itself even when you are doing daily life activities or busy with other works, and these signals coming from the body are disrupting your life" (P8).
- "It is a condition that negatively affects my daily life, significantly reduces the comfort of my life, and I feel the need to take painkillers" (P9).

Sub-theme III: Negative impact on social interactions.

Some participants stated that pain affects relations with the social environment.

- "…it is a situation that will affect my relationships with my social environment" (P2).
- "This disease caused my social life to be completely disrupted. I couldn't spare time for my family and my children, I couldn't take care of them" (P4).

Theme 2. Characteristics of Pain Experienced During COVID-19 Infection

This theme was examined in 4 sub-themes: anatomical site of pain, characteristics of pain, duration of pain, and severity of pain.

Sub-theme I: Anatomical site of pain.

Participants stated that they generally experienced joint (7), head (5), back (6), muscle (3), eye (3), throat (3), waist (2), chest (2), and bone (1) pain.

- "I've had the most headaches and joint pain. Then I got back pain"(P1).
- "I had pain in the back site for 3-4 days. In the first days of the infection, I felt widespread muscle aches" (P9).

Sub-theme II: Characteristic of pain.

Participants generally stated that they experienced throbbing, tingling, friction, stinging, and pressure-type pain: "…I experienced stinging and throbbing pain in my eyes" (P8).

One participant, who stated that she had stinging bone pain, had experienced this type of pain for the first time in her life: "Every bone in my body ached. And I felt all my bones sinking into my skin. My bones were squeezed and I felt like they were going to crack. The pain in my ribs was preventing me from breathing….I had stabbing pains. I have never experienced such pain until now" (P2).

Sub-theme III: Duration of pain.

Participants stated that, in general, pain complaints started with the onset of infection and these pains continued for approximately 3-25 days: "These pains occurred as soon as the disease started. Initially, these pains started as mild, then became unbearable. I had severe pain for about 8-10 days. After that, my pain gradually decreased" (P2).

While the majority of the participants stated that their pain disappeared after the infection, six participants stated that some of their symptoms continued for a while after the infection.

- "…I do not have constant pain at the moment, but unlike normal, I have occasional pains such as back, ankle, and foot pains" (P2).
- "My pain started a week before the COVID-19 test along with coughing. It went on for 2-3 months and still has effects" (P15).
- "The illness lasted for about 25 days, the pain continued throughout the illness, and now I continue to experience constant headaches, dizziness, and nausea" (P4).
- "…I had severe complaints for a total of 2 weeks and suffered from severe loss of appetite with the disease. My pain does not continue at the moment, but I still have loss of appetite and nausea, I go to the doctor constantly. I lost a lot of weight during this process" (P5).
- " This illness left me with occasional dry cough and weakness, I haven't been able to get over this trouble yet" (P7).
- "10 days have been heavy, then fatigue, palpitations continued, taste and smell were not fully recovered" (P10).

Sub-theme IV: Severity of pain.

It was determined that the participants, who stated that they experienced pain with a minimum of 3 and a maximum of 10 pain, experienced an average of 7.73 ± 1.98 pain according to NRS. One participant stated that coughing even more increased the severity of pain: "When I coughed, especially I was experiencing sore throat, severe pain in the chest and back. My head ached even more severely, throbbing, while coughing" (P2).

A participant who stated that he had head, back, and joint pain for 2 weeks expressed the severity and effect of the pain he experienced with the following sentences:

"First of all, I suddenly felt very weak and could not lift my head. It felt like my head was stuck between something. It hurt when I was lying down, it hurt when I got up, I didn't know what to do. My joints ached as if they had been rubbed against somewhere. I used painkillers, but it still hurt all the time. In my back pain, it was like needles were pricking my back. I had these pains for about 2 weeks, then it gradually decreased and one day I noticed that my pain was relieved when I got up. That's when I realized I was recovering" (P1).

Theme 3. The Effect of Pain Experienced During COVID-19 Infection on Daily Life

Some participants stated that they had trouble sleeping because of their pain:

- "At first, I couldn't sleep, neither night nor day. I had problems such as irregular sleep, constant shifting in bed, having to stand up and walk around" (P3)
- "My joint pains especially caused sleep problems. The pain was getting worse at night" (P6)

Some participants stated that they had difficulty standing during this process and they felt the need to lie down all the time.

- "I felt the need to sleep all the time, I couldn't get up" (P2).
- "I didn't have a daily life, I couldn't get out of bed" (P15).

One participant who stated he had a headache said that when he lifted his head, he felt as if he was stuck between two stones: "The pains were so strong that I couldn't do anything. I had difficulty walking and standing. When I lifted my head, I felt like I was stuck between two stones" (P1).

Some participants stated that their social lives were adversely affected due to the quarantine process and the intensity of the symptoms experienced.

- "I was constantly tired. This illness caused me to completely detached from my social life. I couldn't spare time for my family and my children, couldn't take care of them. Because it was very challenging to my daily life, I couldn't do any work. I wanted to sleep all the time, and actually I had to" (P4).
- "I couldn't do any work on my own. Fatigue and weakness affected me a lot" (P13).

Theme 4. Management of Pain Experienced During COVID-19 Infection

Sub-theme I: Methods used to relieve pain.

A total of 73.3% of participants stated that they used analgesics for pain. In addition, some participants stated that they used methods such as resting, cold application, herbal teas, vitamin supplements, milk-yogurt, garlic, onions, and consuming plenty of fluids.

- "I drank a lot of water to cleanse my body. I used the medicine the doctor gave me. I slept and rested all the time" (P4).

- “I drank thyme tea every day, ate lots of fruit. I ate yogurt continously. Maybe that’s why I slept so much, I don’t know. I ate too much garlic yogurt. Vegetables, fruits, milk, yogurt became my main food and indispensable, I consumed approximately 4-5 liters of water every day because I was sweating excessively” (P7).
- "I took painkillers, applied cold, stayed in the dark room, and took blood thinners" (P8).

One participant stated that he wanted to apply external pressure to his head for pain, but did not apply it because his family did not allow it: “I slept, rested, used painkillers. I said my head was like a log, it was stuck, I wanted to apply even more pressure from the outside. Some women with headaches tie their heads with a cloth, I wanted to do what they did, but my family wouldn’t let me" (P1).

While some participants stated that they ate onions and garlic in this process, one participant cited using these products because they believed in their antibiotic effect: “I used all the medicines the doctor gave me. In addition, I tried to consume plenty of onions and garlic, as I thought it was beneficial in terms of antibiotics. I forced myself to eat, even though I had loss of appetite. And especially in this process, I tried to consume more healthy and vitamin-rich things. I tried to lie down and rest” (P5).

One participant stated that he was relieved by walking for his night pains: “Sometimes I used to take a walk in the house during the night pains, it was relieving” (P6).

One participant stated that he used only one or two doses of analgesics and he lay down, and slept: “I took one or two dose of painkillers. Other than that, I didn’t feel the need to take painkillers. I rested” (P9). One participant stated that she could not do anything: “I couldn’t do anything…….I couldn’t even drink water because I didn’t eat anything, I couldn’t sleep for 3 days. That’s why I couldn’t do anything" (P15).

Sub-theme II: The effectiveness of the methods used.

While 40% of the participants stated that the methods they used during the infection process were effective in pain management, 60% stated that the interventions were not sufficient and their pain did not go away.

- “The treatments I applied lifted me up. They gave me strength otherwise I would want to sleep all the time” (P10).
- “…only taking paracetamol type painkillers provided pain control and not necessary extra interventional procedures” (P9).
- “Maybe it prevented me from experiencing more intense pain. But I can never say that it was completely gone. My pain continued. The virus seemed to have taken control of the entire body. The pain continued until the effect of the virus wore off” (P1).
- “Walking and painkillers were temporary solutions, but I would do the same again” (P6).

Theme 5. Fear of Re-Experiencing the Pain Experienced During COVID-19 Infection

Participants were asked for their views on fear of re-experiencing the pain they experienced during COVID-19 infection. Eleven participants stated that they were afraid of experiencing these pains again.

- “I am still terrified of experiencing back pain” (P13).
- “Yes, I was very scared. I was very afraid that those pains would be permanent. Because it was so violent and it hurt so much. It was blocking my whole life. I thought I was going to die” (P2).
- “…I was afraid because I thought that these pains would continue even though the disease passed” (P3).
- “I was very scared and I still afraid. The reason is that the pain was very severe” (P15).

Some participants stated that they were afraid because the pandemic was still continuing. One participant said that this disease was very different from the diseases he had experienced before: “I am terrified of getting COVID-19 again and experiencing the same symptoms again. This disease has not passed yet and there is a possibility that we will be caught again. This scares me. I had flu many times before, got sick and went to bed. But this disease is nothing like them. I have never experienced such symptoms before” (P1).

Theme 6. Metaphors for Pain Experienced During COVID-19 Infection

Participants were asked to fill in the sentence "The pain I experienced during the COVID-19 infection is like……. Because……" according to their experiences. Accordingly, the metaphors of the participants are given in Table 3.

Discussion

Pain is one of the health problems that led the individual to seek medical care from health care professionals (Aslan, 2014), reduced patient quality of life, and affected patient comfort (Dueñas et al., 2016). In this study, the participants generally explained pain as a distressing emotion, feeling, neural transmission or reaction of the body that hurts, disturbs, is painful, and negatively affects daily life activities and social relations. In fact, some participants said that they could not forget the pain they experienced even if they were busy with other things. They stated that the pain they experienced disrupted their lives and reduced their comfort of life.

Like many infectious diseases, pain has been one of the common symptoms of COVID-19 infection. The literature states that COVID-19 patients may experience various pain symptoms such as headache, myalgia, sore throat, and abdominal pain after exposure to the virus (Chow et al., 2020; Pan et al., 2020; Zhu et al., 2020; Xu et al., 2020). The virus can cause different pain symptoms by invading different tissues of the body (Weng et al., 2021). In this study, it was determined that the participants generally complained of pain during the infection process and the participants mostly experienced joint, head, and back pain. The differentiation of pain symptoms experienced by individuals may be due to the fact that the virus affects many parts of the body and individuals have different pain perceptions.

While the majority of the participants in the study stated that the pain and other symptoms they experienced during COVID-19 infection disappeared after the disease, six participants stated that some of their symptoms still continued after the disease. Similarly, a study by Carfi et al. (2020) evaluating the ongoing symptoms of individuals after COVID-19 infection found that the majority of individuals continued to experience symptoms such as fatigue (53.1%), dyspnea (43.4%), joint pain (27.3%), and chest pain (21.7%) (Carfi et al., 2020). In another epidemic, SARS infection, chronic post-SARS syndrome consisting of symptoms such as widespread myalgia, fatigue, depression, and non-restorative sleep that persists for almost 2 years (Moldofsky & Patcai, 2011; Clauw et al., 2020). In addition, some patients infected with 3 different pathogens (Ross River virus, Coxiella burnetii, and Epstein-Barr virus), experienced a postviral pain syndrome up to 12 months after infection (Clauw et al., 2020; Hickie et al., 2006). As noted in the literature, the presence and severity of somatic symptoms during acute infection may be closely related to the development of chronic fatigue and pain after infection (Clauw et al., 2020).

Table 3
The Metaphors of pParticipants about the Pain They Experienced During COVID-19

Metaphor	Frequency	Explanation
Pliers	2	*Think of an organ tightened with pliers, we usually use this tool for repair, but this is not repair, it's like war. It damages the organ it squeezes. (P1)* *….. literally my back ached like it was split in half and compressed. (P3)*
Pieces of glass	3	*The pieces of glass sink into body of a person and it hurts a lot, it wounds a lot, just like it. (P2)* *The broken glass, I felt like its broken surfaces were sinking into my whole body.* *Because my bones hurt so much that I can't explain. I can't really describe that process, it's a period in my life that I don't want to remember, but the effect is still on. (P4)* *…. joint pains... especially, when my joints move, they are ached like scratched by pieces of glass. (P6)*
Balloon or ball	2	*When the balloon or ball inflates, it compresses the area it is in. I felt such a tightness in my chest. As I started to relax a little, I felt the balloon deflate. (P5)* *As the ball is hit, it is thrown from place to place, it was just like that in my joints and my head. I couldn't touch my body. (P12)*
Wormy apricot seed	1	*It's like a wormy apricot kernel..... It looks very nice from the outside but there is a wormy inside. My situation was the same. At first you don't notice it at all, you feel pretty good. But no one sees the war inside you. (P7)*
Knife	1	*I felt intense pain as if a knife had been pierced. (P8)*
Table	1	*Very heavy things are being placed on the table.....I also experienced pain on my back as if I was carrying such heavy objects. (P13)*
An object stuck in a narrow space	2	*I felt like I was trapped in a tight space. As this area was narrowing, my pain was constantly increasing. (P2)* *As the area narrowed, my pain increased, and my breathing was short. (P15)*
Foreign body	1	*I watch a lot of science fiction movies. In those movies, different foreign objects get into people. It takes full control and does whatever it wants to the body. Think of a living flower, how it can dry out in an instant. This virus takes over the whole body at the same time and causes pain all over the body. (P1)*
Heavy machinery	1	*I felt pain all over me, as if a heavy machinery had passed over me and I had an accident. I felt like I was stuck under a heavy machinery. I felt a heavy burden on me. It was like I was broken all over it. (P10)*
Sofa	1	*I felt tons of heavy on me as if someone was sitting on me, the pain was just like that. (P11)*
Fire	1	*It was as if my back had caught a fire from the pain. (P9)*
Bicycle	1	*Whenever I tried to stand up, my legs ached like I was riding a bike. (P14)*

*Some participants provided two metaphors.

Pain, which is one of the main reasons why individuals seek health care services, has cognitive, motivational, emotional, behavioral, and physical components. Pain is accepted as one of the most important determinants of quality of life. Ongoing and uncontrollable pain has a detrimental and devastating effect on almost every aspect of a patient's life. It can cause anxiety and emotional distress, limit functional capacity, and impede an individual's ability to fulfill family, social, and occupational roles. It is an obvious fact that pain, which affects people in many aspects, effectively reduces quality of life (Katz, 2002). In this study, some participants stated that they had sleep problems due to their pain, had difficulty standing and felt the need to lie down all the time. One participant, who stated that he had a headache, said that when he lifted his head, he felt as if he was stuck between two stones. Some participants stated that their social lives were adversely affected due to the quarantine process and the intensity of the symptoms experienced. When metaphors of participants related to pain are examined, the intensity of pain and suffering due to pain is seen. Many pharmacologic and non-pharmacologic methods are applied in the management of these pains (Dikmen & Ziyai, 2021). In this study, 73.3% of the individuals stated that they used analgesics for pain. In addition, some participants stated that they used methods such as resting, cold application, herbal teas, vitamin supplements, milk-yogurt, garlic, onions, and consuming plenty of fluids. Most individuals used pharmacologic treatments and also benefitted from different methods in an effort to get treat the virus.

Subjective experiences like pain are strongly influenced by individual genetics, gender, social, cultural and personal parameter (Michaelides & Zis, 2019). Participants were asked whether they feared re-experiencing the pain they experienced during the COVID-19 infection. Eleven participants stated that they were afraid of experiencing these pains again. Unfortunately, a fear of pain may develop in an individual who has experienced recurrent and intractable pain (Ünver & Turan, 2018; McNeil & Rainwater, 1998). As a matter of fact, 40% of the participants in this study stated that the methods they used were effective in pain management, while 60% stated that the interventions were not sufficient and their pain did not completely disappear. The stress, anxiety, and sense of uncertainty experienced by individuals during the epidemic may have affected their pain perception. Likewise, severe pain can cause a person to fear the experience of pain and cause a fear of pain in the individual.

Limitations

In the study, the meaning that a small number of participants attributed to their experiences was examined in depth by using qualitative research design. Since the number of participants is small, the results are not suitable for generalization. Therefore, the results from this study cannot be generalized to all individuals who experience pain during the COVID-19 experience. This is a limitation of the research. Another limitation of this study is that the data of the study were collected by telephone interviews with participants.

Conclusion

As a result of this study, participants who experienced pain during the COVID-19 infection generally defined pain as a feeling that hurts and causes people to suffer. It has been observed that individuals used many methods to relieve the intense pain they experienced. However, nearly half of the participants stated that their pain did not completely disappear despite the many methods they used. Approximately two-thirds of the participants were afraid of re-experiencing the pain they experienced during the COVID-19 infection.

Implications for Nursing Education, Practice, and Research

As in many non-communicable diseases, individuals may experience intense pain in viral infectious diseases. The experiences of participants demonstrated that pain affected all aspects of their lives. Based on this, it should be understood that pain is not a one-dimensional concept in nursing education. People are not only

physically affected by pain. Nurses have an important place in the care of the patient with pain. In order for nurses to be effective in pain control, they must first be able to describe the current and potential pain conditions of patients. In addition, for effective pain management, it is important to define the pain behaviors of patients correctly, to determine the opinions of the patients about the pain, and to evaluate the effects of the pain experienced. Nurses should assess how pain affects the individuals' lives and strategize with patients how to relieve their pain. Nurses should determine the pharmacologic and non-pharmacologic methods used by individuals in the pain process and should educate individuals about the most appropriate method. Nurses should also understand the pain experiences of individuals in the process of viral diseases and question the opinions of individuals about pain. In future nursing research, studies should be conducted to determine the methods of coping with pain by individuals who experience pain during viral disease. Individuals should be informed about the effectiveness of these methods. In addition, considering that the patients participating in this study are aged <65 years, it is recommended that future qualitative studies investigate the pain experiences during viral diseases of individuals aged >65 years.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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