

Lived Experiences of Recovered COVID-19 Patients after Hospitalization: A Phenomenological Research

Abstract

Background: The deadly novel Coronavirus Disease 19 (COVID-19) epidemic has sickened and killed millions of people around the world. Accordingly, Iran has had the second highest incidence rate of COVID-19 deaths in the world. Because this disease affects all individual, familial, and social aspects, there is not enough information about experiences of COVID-19 patients. However, these experiences could be a missing link in explaining their attitudes, beliefs, and concerns for improving care and treatment processes during and after the disease. **Materials and Methods:** Descriptive phenomenological research was conducted in 2020 to explain experiences of 21 COVID-19 patients after post-hospitalization recovery. Semi-structured interviews were used as the data collection tool via purposeful sampling, which were continued until data saturation and analyzed using Colaizzi's seven-step method. **Results:** The main theme of "value of health" and the seven categories of (1) inefficient self-care, (2) overcoming the catastrophic crisis, (3) the shadow of death, (4) coping behaviors and resilience, (5) the need for support and accountability, (6) sympathy, and (7) new insights as well as 38 main codes were extracted. The patients' general explanation in the early stages of the disease, recovery, and subsequent periods included transition from the crisis to new insights into physical, mental, sexual, familial, and economic dimensions that finally led to the review value and concept of their life. **Conclusions:** The findings of this study can be used to fulfil care and treatment needs of the patients, their families as well as caregivers, psychologists, counselors, health planners, and managers presently and in the future for similar diseases.

Keywords: COVID-19, Iran, patients, qualitative research

Introduction

The global pandemic of Coronavirus Disease 19 (COVID-19) was declared on March 2020 by the World Health Organization (WHO).^[1] Roughly 50,266,000 confirmed cases of COVID-19 have been reported, including the estimated 1,254,000 deaths in the world.^[2] Based on the WHO report, Iran has experienced the second highest incidence of COVID-19 in the world, with 682,486 confirmed cases and 38,291 deaths caused by this disease.^[3]

In addition to physical problems, the novel coronavirus affects the mental health of the people.^[4] Initial data demonstrated the possibility of experiencing depression, anxiety, and insomnia in COVID-19 patients,^[5] with similar results obtained in severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and middle east respiratory syndrome survivors.^[6,7] Coronaviruses cause

psychological disorders both directly and indirectly.^[8] Bad feelings, such as doubt about the future, fear of the disease, social isolation, and bad memories of the severe illness, could produce psychopathological outcomes.^[9,10] The prevalence of the Post-Traumatic Stress Disorder (PTSD) has been observed in 4–41% of COVID-19 patients.^[11]

Hospitalized COVID-19 patients require the regular monitoring of vital signs.^[12] In Iran, patients in the moderate pulmonary phase, the severe pulmonary phase, and the intensified inflammation phase (the very severe phase) are eligible for hospitalization. In these cases, care and treatment measures include oxygen therapy, hydration and electrolyte replacement, careful monitoring of exacerbation symptoms, and supportive therapies for various organs.^[13] Because of the uncertainty of treatment and the disease process, COVID-19 patients suffer

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from a new situation they do not experience before.^[4] A descriptive qualitative study by Chen *et al.*^[14] showed that patients' experiences in the early, middle, and final stages of the quarantine as well as their self-coping strategies and external support were highly evident during the quarantine period for close contacts. In addition to the patients, the majority of nurses and medical team members are prone to stress, loneliness, sleep disorders, and fatigue during the COVID-19 epidemic.^[5,15] Many experiences, understandings, and beliefs of COVID-19 patients are difficult to quantify; thus, qualitative research offers suitable tools for examining these facts in these cases.^[16]

To date, many qualitative studies have been conducted around the world, focused on lived experiences of nurses, caregivers, healthcare providers, and patients in quarantine or during hospitalization in the COVID-19 outbreak. Understanding the differences and similarities of the participants could be very valuable for health policymakers and governments for both being aware of physical dimensions of the virus and identifying various aspects of the disease yet unknown.^[17,18] In previous studies on COVID-19 patients, issues such as lifestyle changes, disruptions in education and businesses, irritability, worry, and anxiety were expressed by the patients.^[12,19] To complete prior studies that focused on mental health and psychological distress, in the present study, the patients' experiences were examined not only at the time of the illness and hospitalization but also at the time of discharge, recovery, and return to normal daily activities. However, such experiences were not investigated in similar studies. Given the limited number of similar studies having considered all aspects of the disease, including physical, mental, economic, social, and sexual domains during and after COVID-19 contraction, this qualitative study was conducted to explain the lived experiences of the recovered COVID-19 patients after hospitalization.

Materials and Methods

The type of the present qualitative study is descriptive phenomenological, which was conducted in 2020. The phenomenological method tries to describe human experiences in a context in which they occur.^[20] The participants in this study were those who recovered from hospitalization (21 days after contracting the disease) at the Diabetes Polyclinic of Shahid Sadoughi University of Medical Sciences. They included 21 male and female COVID-19 patients who were selected via purposeful sampling. Data saturation was used to determine the sample size in the present study. Accordingly, data saturation is reached when no new information is expected to be added to enhance or change the findings of a study. The inclusion criterion of the present study was definite COVID-19 contraction based on national diagnosis protocols in Iran.^[21] The samples included in the present study were qualified

patients who were hospitalized from February 20 to April 20 and willing to participate in this study.

Semi-structured individual interviews were conducted to collect the required data. The interviews were conducted by a second author (a reproductive health specialist and a psychologist) with required interviewing experiences in other qualitative studies. After full recovery and hospitalization, the COVID-19 patients attended the Diabetes Polyclinic of Shahid Sadoughi University of Medical Sciences to receive different healthcare services (counseling, preclinical exams, etc). The Diabetes Polyclinic of Shahid Sadoughi University of Medical Sciences is a therapeutic center in the downtown of the Yazd city in which people (not just diabetic patients) of various socio-economic statuses can receive different health-related services. This center is equipped with various medical specialists, staff members, and enough space for delivering general health services. This center provides maximum sampling variability with people of different socio-economic, age, gender, urban, rural, educational, and health statuses. After selecting the participants, the purpose of the research was explained to them. Besides, written informed consent was obtained from them, and ethical considerations, especially in terms of the privacy and confidentiality of the interviews, were taken into account. Besides, the interviews were conducted along with recording of the participants' voices. Each interview lasted around 30–60 minutes, and the interviews were conducted in person at the Diabetes Polyclinic affiliated to Shahid Sadoughi University of Medical Sciences, Yazd. All interviews were conducted in accordance with health protocols for the prevention of COVID-19 as announced by the Iranian Ministry of Health and Medical Education^[22] via practicing social distancing and wearing masks. The main question of the present study was "Would you share your experience of contracting COVID-19?" Following the aforementioned question, some other questions were asked, including "How did you find out you were infected with this disease?", "How was your relationship with people around you?", and "What kinds of problems were you faced with during this disease". Each session of the interviews ended with the question "Do you think there is another question I should have asked?" In the present study, the data were analyzed using Colaizzi's seven-step method via MAXQDA software.^[23] After each interview, the entire audio of the interview was transcribed word for word as the unit of analysis. Next, to initiate the descriptive phenomenological analysis based on the first step, the typed text was read carefully several times to obtain a general understanding. In the second step, the researchers extracted important meaningful words and statements (either evident or hidden) as well as memos of each interview. In the third step, the meaning of each phrase was explained and summarized. Next, the meanings extracted from the statements were combined to offer a shared meaning. In the fourth step, the meanings extracted in the previous

step were organized into categories of codes and themes, and significant statements were extracted. In other words, the meanings extracted in the previous step were placed in separate clusters. In the fifth step, the related codes were placed in a more general category. Afterward, the categories of codes were placed in clusters from which pivotal concepts were obtained. In the sixth step, the findings were discussed and analyzed. In this step, a comprehensive description of the investigated phenomenon was formulated in a clear statement. For this purpose, the key concepts, selected unanimously by the researchers, were written in a narrative summary. In the seventh step, some meetings were held with several participants, and their opinions were asked about the results of the study. Accordingly, the results were validated. To examine the rigor and accuracy of the data in the present study, the four criteria of dependability, credibility, conformability, and transferability (as suggested by Lincoln and Guba) were employed.^[24] To ensure the rigor and accuracy of the study, the analyzed text was viewed and confirmed by the participants once more. In addition, it would be reviewed by the researcher if it was deemed necessary. Moreover, the analyzed text was evaluated and approved by two experts in the field of phenomenology outside the research team to ensure the accuracy of the analysis process. To increase transferability of the findings to other situations or groups, maximum diversity was employed in selecting the participants. The participants were described accurately, and the exact steps of the study were recorded (by saving audio and text files) so that they could be reviewed by others. These measures were taken to achieve rigor in the present study. The criteria of the 32-item COREQ checklist^[25] were also employed to evaluate the qualitative study in this research. To achieve maximum diversity, the male and female participants of different economic and social statuses, ages, and educational levels were sampled, and data collection continued until data saturation.^[26]

Ethical considerations

To observe ethical considerations in this study, written and verbal informed consent was obtained from the participants; besides, the individuals had the right to quit the study any time they wished. The present study was approved by the Ethics Committee of Shahid Sadoughi University of Medical Sciences of Yazd under Ethics Code IR.SSU.REC.1397.057.

Result

In this study, the participants were 21 COVID-19 patients, including 12 women and nine men, within the age range of 28–72 years. In addition, their educational level ranged from primary education to the Doctor of Philosophy (PhD) [Table 1].

After analyzing interview scripts and removing irrelevant codes, as many as 299 primary codes were extracted. All

Table 1: Participants' characteristics (n=21)

Participant no.	Gender	Age	Job	Education
P1	Male	48	Employee	Physician
P2	Female	49	Employee	Bachelor's degree
P3	Female	32	Employee	Bachelor's degree
P4	Female	46	Employee	Bachelor's degree
P5	Female	30	Worker	Master's degree
P6	Female	44	Employee	Bachelor's degree
P7	Male	33	Employee	Master's degree
P8	Male	41	Employee	Bachelor's degree
P9	Female	47	Employee	Bachelor's degree
P10	Female	53	Employee	High school diploma
P11	Male	66	Retired	Higher secondary
P12	Female	37	Housewife	Bachelor's degree
P13	Female	41	Employee	PhD
P14	Male	72	Retired	Higher secondary
P15	Male	39	Employee	Bachelor's degree
P16	Male	33	Self-employed	Bachelor's degree
P17	Male	50	Self-employed	High school diploma
P18	Female	53	Housewife	High school diploma
P19	Female	30	Self-employed	Master's degree
P20	Female	39	Worker	Bachelor's degree
P21	Male	60	Worker	Elementary

codes were shown in a theme called “value of health”, which included the seven categories of (1) inefficient self-care, (2) overcoming the catastrophic crisis, (3) the shadow of death, (4) coping behaviors and resilience, (5) the need for support and accountability, (6) sympathy, and (7) new insights, with 18 clusters and 38 main codes [Table 2].

Value of health was the main theme extracted in the present study. Accordingly, the majority of the patients found out that the experience of this disease was very different from their experience of other diseases. Besides, they maintained that this disease transformed their insight into life. They also stated that they considered life as the enjoyment and use of the gift of health.

1. Inefficient self-care

Inefficient self-care was one of the main categories, which included the two clusters of perceived threat and health literacy. Most of the participants stated that they had not worn face masks in public areas and in the workplace because they believed that the risk of the disease was not as serious as the media reported. “*I had a headache, a fever, and sever muscular pain for a couple of days, but I did not think I was suffering from COVID-19 because I knew very little about it and had no idea of the way to prevent it*” (Participant 12).

2. Overcoming the catastrophic crisis

The concept of overcoming the catastrophic crisis was one of the categories extracted from the participants' experiences. This category included the clusters of

Table 2: Extracted Themes, Categories, Clusters, and Main Codes

Main codes	Cluster	Category	Theme		
Low perceived sensitivity	Perceived threat	Inefficient self-care	Value of health		
Low perceived threat					
Insufficient knowledge about the disease	Health literacy	Overcoming the catastrophic crisis			
Tolerating physical complications of the disease	Challenges with disease complications				
Tolerating mental complications of the disease	Financial and economic problems caused by the disease				
Economic burden of the disease					
Risk of losing one's job	Concerns over the family and/or other close relatives				
Fear of infection of other family members					
Additional costs of the disease related to family members and/or other close relatives					
Fragility of the relationship	Excessive fear because of the unknown scary nature of the disease	Shadow of death			
Uncertainty in diagnosing the disease					
Problems in the disease treatment protocols					
Disbelief in recovery	The feeling of being close to death	Coping behaviors and resilience			
Image of death	Effective coping behaviors				
Hopefulness					
Positive thinking about the disease	Ineffective coping styles				
Denying one's infection with the disease					
Lack of control over negative thoughts and emotions					
Obsessive behaviors	Emotional needs			Needs for support and accountability	
Need for empathy					
Paying due attention to individual needs	Sexual and marital needs				
Sexual needs					
Marital needs	Newly emerged specific COVID-19-related needs	Sympathy			
Need for mental counseling					
Need for physical counseling	Sympathy with the medical team				
Understanding the complex situation of the medical team					
Understanding the meaning of altruism in the medical team	Sympathy with other patients				
Understanding main concerns of other patients with COVID-19					
Understanding the status of other patients with incurable diseases					
Understanding problems of other patients' families	Sympathy with patients' families				
Understanding concerns of other patients' families					
Re-conceptualizing the meaning of life	Self-compassion via understanding the value of life	New insights			
Existential values					
Strengthening one's determination	Exercising and using post-recovery strategic skills				
Wisdom concerning disease re-infection management by exhibiting disease-prevention behaviors					
Understanding the importance of the continuing post-treatment follow-ups					
Skillful behaviors for managing post-recovery concerns	Motivating management of unpleasant post-recovery feelings				
Dealing with post-treatment stigmas of the disease					

challenges with disease complications, financial and economic problems caused by the disease, and concerns over the family and/or other close relatives.

2. 1. Challenges with disease complications

One of the clusters of this category was related to symptoms most of the participants had during the disease, which included a fever, a nightly fever, severe muscular pain, headaches, physical weakness, and coughs. Moreover, some of the participants suffered from

shortness of breath and visited a physician to receive treatment.

“The doctor said my lungs were involved, and I had to be hospitalized. Besides, I had shortness of breath and coughed so much that I felt there was no air. Therefore, I felt really bad” (Participant 10).

Moreover, the patients stated that they experienced mental health problems, such as insomnia and sleep disorders. *“I felt so bad that I would not know where I was. Besides,*

days and nights were no longer different to me, and I would not feel normal at all” (Participant 2). 2.2. Financial and economic problems caused by the disease were the other common clusters among the participants. Some of the patients faced financial problems because they failed to conduct their daily work. Moreover, some of them faced pay cut by their employers because they could not attend their workplace. *“I have to pay 6 million Tomans a month for the loans I received. I was able to pay off the loans by working as a security guard at a hospital. COVID-19 reduced 3 million Tomans of my income”* (Participant 1).

2. 3. Concerns over the family and/or other close relatives

Most of the participants talked about family problems when they were suffering from the disease. Some of the patients felt bored after getting infected with the disease. Besides, the intimate relationship between the patients, their spouses, and children had been reduced. *“My behavior, words, and disturbances disturbed the whole family, so they were upset at me”* (Participant 11).

3. Shadow of death

The concept of shadow of death was one of the main categories identified in the present study. This category included the two clusters of excessive fear because of the unknown scary nature of the disease and the feeling of being close to death.

3. 1. Excessive fear because of the unknown scary nature of the disease

The patients alluded to their experiences of the indefinite diagnosis and management of COVID-19. They were suffering from anxiety, fear, and confusion because they did not know if they were infected with the disease and what measures they could adopt in the process of treating the disease. *“I visited a doctor after some days of having a fever, headaches, and confusion. The doctor said, “It is not COVID-19, just take some rest”. Since I did not feel well after a couple of days, I visited a specialist. However, he did not give me a definite answer and said, “Go to Shahid Sadoughi Hospital”* (Participant 14).

3. 2. The feeling of being close to death

This feeling was another thing that most of the patients experienced. Announcements of deaths in China and those in the city of Qom made the patients believe in incurability of the disease. *“The TV announced deaths of patients every day, so I was really scared that I might die as well. I would not know where to go”* (Participant 9). *“I felt bad and had so terrible coughs that I visited an infectious disease specialist several times. However, his drugs were not effective. Since I could not breathe and felt that death was very close, I called 911, and they took me to the hospital”* (Participant 13).

4. Coping behaviors and resilience

This category included the two clusters of effective coping behaviors and ineffective coping styles. In coping with the crisis caused by the disease, the patients had different reactions. Individuals who were optimistic and believed in their ability to deal with the disease showed effective coping behaviors. However, given their personality traits, some others exhibited ineffective coping behaviors.

Effective coping behaviors included two main codes of hopefulness and positive thinking about the disease. These behaviors are often exhibited during the quarantine period. During this period, the patients usually thought that they would feel better soon. Thus, they had fewer symptoms and complications of his disease. *“I had lost my gustatory and olfactory senses. I started dusting and cleaning the house and told myself that I would be fine soon. It was just a matter of time, and I am fine now”* (Participant 6).

Some of the patients exhibited ineffective coping behaviors, including blaming oneself, feeling guilty, feeling sad, and being angry. *“I felt terrible and was short of breath. Instead of being hopeful, I was just lying in bed, which looked like a coffin to me. Besides, I assumed that I was dead and found myself between life and death. It was really hard, and I was always crying”* (Participant 1).

5. The needs for support and accountability

The other category perceived in the present study was support and accountability, which included the three clusters of emotional needs, sexual and marital needs, and newly emerged specific needs related to COVID-19. The concept of support and accountability refers to the needs expressed by the patients when infected with the disease and after recovery. The patients stated that they were in need of special care and that their mood changed after infection with the disease. *“When I got sick, I was really emotional. Thus, the need for the family as well as their support and sympathy were really important to me”* (Participant 7). For some of the participants, sexual and marital needs had changed.

During the period after infection with COVID-19, most of the patients gained new experiences; for instance, their bodies were more sensitive to cold, and they expressed a need for sweets more than before that period. *“In the past, our air conditioner was always on. Now, I can no longer tolerate cold air and usually turn it off”* (Participants 2 and 16).

6. Sympathy

This category included the three clusters of sympathy with the medical team, sympathy with other patients, and sympathy with patients’ families. The concept of this category implies the understanding of the problems of the medical team, patients, and patients’ families during the period of infection with the disease. *“When I was*

hospitalized, I really felt the difficulties experienced by the nurses and doctors. Eating food when wearing those garments was really difficult. Some nurses had to feed other nurses. They would ask my relatives and friends to be more careful for the sake of the medical team” (Participant 7).

The participants also stated that they could understand the problems that COVID-19 patients and their families faced during the disease.

7. New insights

This category includes the three clusters of self-compassion via understanding the value of life, exercising and using post-recovery strategic skills, and motivating the management of unpleasant post-recovery feelings. Besides, it is associated with post-recovery experiences. Most of the patients stated that infection with this disease was a new experience. The cluster of self-compassion via understanding the value of life refers to the understanding of the purpose of life and the use of one’s opportunities in life. The patients stated that their insight into life had changed and that caring for life itself was the goal of most of them. *“Since I suffered from this disease, I care a lot for my health and using opportunities in life. Thus, I value the gift of life and my health much more and try to avoid trivial things. When I was infected with this disease, I really had a moment between life and death” (Participant 11).*

The cluster of post-recovery strategic skills is associated with necessary measures that could be taken for accelerating one’s treatment. The patients realized the significance of adhering to prevention principles after their own infection with COVID-19. Thus, they recommended others as well to follow the protocols.

The cluster of motivating the management of unpleasant post-recovery feelings was related to controlling obsessive feelings the patients experienced after their recovery. Accordingly, the patients were extremely worried about being infected with the disease for the second time. Besides, they were worried about physical and mental complications of the disease. However, they felt better over time. Behaviors, experiences such as adopting extreme hygiene measures and the stress of leaving home and getting re-infected with COVID-19 were reported by most of the patients. However, they managed them with the help of their families. *“Leaving home was a tragedy for me. I was afraid of being infected again so that I might carry the virus on the bread that I would take home. However, I managed to overcome these thoughts little by little” (Participant 17).*

Moreover, the patients reported that they felt being rejected in their relationship with colleagues, neighbors, and friends. *“When the quarantine period finished, I went to my sister’s home, but her family did not feel happy to see me. They considered me like a leprosy patient, which was*

a terrible experience. However, I did my best to understand them” (Participant 13).

Discussion

The present study aimed to share experiences of the recovered COVID-19 patients who had been hospitalized using a phenomenological method. In this study, one theme, that is, the value of health, and seven categories were extracted. The categories included the inefficient self-care, overcoming the catastrophic crisis, shadow of death, coping behaviors and resilience, the need for support and accountability, sympathy, and new insights.

The value of health was the only theme of the present study. In other words, suffering from COVID-19 provided an opportunity to the recovered patients to reflect on the meaning of life. For example, if the patients used to consider themselves tired, failed, and disappointed individuals before the disease, they changed their attitude toward their life after infection with the disease. This reflection was the outcome of suffering from an acute disease that threatened their opportunity to survive. Thus, for most of the patients, this disease posed the questions of “Do we really live?”, “What should be important to me?”, “What principles should be important to me from now on?”, and “What are the real values I must care about?” Spiritual values of life, reduced concerns over material issues in life, and strengthened determination could be easily observed in the patients’ words. In similar qualitative studies, the main themes included mental problems,^[27] fear of death,^[18] and physical problems.^[28] However, in a study conducted by Cahapay, the effect of COVID-19 on growth was investigated, which was often related to the change in the role of individuals in relation to themselves and the society. Nevertheless, no change was mentioned in the patients’ attitude toward life.^[29] It seems that the reasons for the difference between the theme of this study and that of similar studies were differences in the level of adaptation to the disease, adjustment of positive and negative emotions caused by the disease among the patients, use of positive coping strategies, and the increased problem-solving abilities among the patients. The participants of the present study were hospitalized with acute respiratory symptoms, such as persistent coughs and decreased oxygen saturation in the first phase of COVID-19 infection. In addition, they had to deal with one of the deadliest, most severe, confusing, and unknown diseases ever. Thus, they managed to overcome the disease, and life had a much more important meaning and value to them. In line with these findings, Collins (2008) quoted Lazarus (1999) as introducing the two strategies of emotion regulation and problem solving adopted for stress management, especially during a crisis.^[30]

Regarding the inefficient self-care, the patients believed that failure to pay attention to prevention principles and the lack of adequate information about the transmission

ways of the disease led to their infection. To explain the cause of this situation, most of the participants in this study were people who got infected with the disease at the first stage of the epidemic and those who did not take it seriously. Moreover, they paid little attention to effects of the information disseminated by the mass media, such as television and cyberspace (Instagram, Telegram, etc.), on the prevention methods, clinical symptoms, and epidemiology of the disease. SARS patients' experiences were consistent with the findings of the present study.^[6]

As to the second category, that is, overcoming the catastrophic crisis, the COVID-19 patients expressed new and difficult experiences that looked like a crisis. The burdens of the disease, such as numerous and severe physical symptoms, including headaches, nausea, recurrent fevers, sleep disorders, and hospitalization, had created a new unpleasant experience, like a crisis, for them. These patients' experiences were consistent with the findings of other studies on COVID-19.^[9,18] Apart from the enduring physical symptoms, anxieties over the possibility of the family members probably getting infected with the disease had made life difficult for them. Moreover, the patients reported negative emotional reactions from their family members. Because of the novelty of the disease and the lack of adequate information on it, individuals, their families, and other relatives and friends had numerous questions. Distinguishing correct information from invalid information and the lack of knowledge about the correct way of dealing with problems impair emotional and mutual relationships between patients and people around them. Moreover, loneliness and quarantine conditions reduce communications and put the patient at the risk of psychological problems.^[28,31] Thus, the supportive role of the family and the society could help the individual go through the illness period. Social support includes information support, emotional support, and financial support. Therefore, social support can greatly help the patient overcome the crisis and reduce physical and psychological complications, such as insomnia, thereby improving adaptation to daily life.^[28] Accordingly, family problems were created for a number of the families who failed to provide sufficient support.

The third category was the shadow of death. Fear of death and anxieties over death include fear of death itself and the events occurring after it. After the patients become hospitalized, they feel bad about the disease, which increases stress and anxiety among them. This category has been found in other studies on COVID-19, being in line with the findings of the present study.^[18] Fear of death was prevalent because of the inefficient treatment process, the lack of appropriate preventive measures, such as vaccines, and news about deaths. When COVID-19 patients enter a hospital or are quarantined at home, there are uncertainties about their death or survival. Accordingly, Davidson states that uncertainties about conditions make patients describe

their situation as suspended, so they will not be able to keep up with life. In fact, this will have an undesirable effect on the patient's mental conditions, thereby leading to numerous psychological problems.^[32] As a result, they are not ready for death, and the sudden death of some patients and relatives complicates their psychological state. Fear of death has been experienced by patients suffering from other diseases, such as acquired immunodeficiency syndrome and cancer as well.^[33] Moreover, depiction of funeral ceremonies and the post-death world as exaggerated by the media affected the patients' mental state.

Another important category was the patients' coping behaviors and resilience during the quarantine period. A number of the patients had effective coping behaviors, but some of them showed ineffective coping behaviors. Spiritual and religious experiences, as powerful sources of adaptation, optimism, hopefulness, and giving meaning to life, enabled the patients to alleviate tensions and pains caused by this disease. Research shows that people exhibiting effective coping behaviors and making better cognitive assessments can cope with the stress created more efficiently.^[34] They mitigate effects of the problem by showing coping behaviors and working out problem-oriented solutions. However, a number of the individuals displayed ineffective coping behaviors. Research indicates that people with such ineffective coping behaviors face numerous problems that lead to resistance to treatments; in addition, they adapt less to families, relatives, and friends, with a negative supportive atmosphere created among the people around them. Accordingly, psychological support could help these people cope with their disease more effectively.

The other category extracted in this study was the need for support and accountability. As already stated, the patients faced unexpected conditions. The individuals who did not show coping behaviors and did not adopt positive strategies were more in need of support than others. As a result, the family, friends, and the medical team are required to pay special attention to the patients' personal needs. Receiving calls from friends, being provided with proper foods, and hearing motivational sentences are likely to reduce stress and the feeling of helplessness. Accordingly, raising one's spirit can reduce one's depression and isolation.^[35]

Another category extracted in the present study was the patient's sympathy with the medical team, other patients, and their families. One of the reasons for not following health protocols is that the society does not have an adequate understanding of the problems created by the disease. Accordingly, people do not react appropriately to a lot of news items. According to the Elaboration Likelihood Model Theory, people do not respond to messages not related to them. The lack of reaction indicates that people do not feel the need for having a reaction. Therefore, it does not make them do abstract thinking.^[36] Thus, hospitalized

people are recommended to encourage other people of the community to adhere to prevention principles.

Obtaining a new insight was the last category extracted in this study, which had not been alluded to in other similar studies on the experiences of COVID-19 patients.^[17,18,32,37] It seems that the reason for the inconsistency was the time of the interviews with the recovered patients. At that time, the problems were relatively resolved, and the patients had achieved relative stability of health and well-being in various dimensions. Accordingly, they had returned to their family, work, and normal social interactions compared to the difficult period of the infection with the disease. At that time, there was an opportunity for the patient to reflect on the disease and its problems from a different point of view. Having observed the pains of other patients and hardships of the medical team, the patients would conclude that if other people in the society and they followed prevention protocols, they would not face such problems. This was the outcome of obtaining a new insight into the disease by the patients. Research shows that positive thinking acts as a barrier to the impacts of negative experiences of the disease.^[19] Accordingly, the role of psychologists and social workers in promoting positive thinking and reinforcing correct behaviors could reduce the effects of stress, depression, loneliness, and disease stigmas.^[20]

In the present study, the value of health was the theme not extracted in other similar studies. Moreover, categories including inefficient self-care, sympathy, and obtaining a new insight were extracted only in the present study. In addition, special attention to physical, sexual, psychological, familial, social, and spiritual dimensions made our study more comprehensive than others. Another unique feature of this study was investigating the patients' experiences not only at the time of infection and hospitalization but also after they recovered and returned to normal daily activities. However, these were less addressed in similar studies.

The only limitation of the present study was the impossibility of conducting interviews at the time of hospitalization. Accordingly, the patients who were selected to participate in the study were in the first phase of the infection with COVID-19 with acute respiratory symptoms, so it was impossible to interview the patients for about an hour. Moreover, the researchers having been banned from entering the hospital because of the increased risk of the infection was another reason.

Conclusion

The general explanations provided by the COVID-19 patients were descriptions of the experiences of various physical, psychological, familial, economic, and social dimensions of the early phases of the disease. In addition, they were about the crisis, recovery, and aftermaths of the disease. The transition from a crisis to a new insight into the disease and its nature resulted in

the reflection on the value of health in their life in these patients. The patients' experiences in this study can be employed in identifying care and treatment needs of patients and their families by treatment and care personnel, psychologists, counselors, planners, and healthcare policy makers in dealing with this disease and similar diseases.

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Conflicts of interest

Nothing to declare.

References

- Zhou F, Yu T, Du R, Fan G, Liu Y, Liu Z, *et al.* Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: A retrospective cohort study. *Lancet* 2020;395:1054-62.
- Zaki Y, Esmaeilpoor H, Baraty A. Study of Citizen's Satisfaction about the Performance of Municipality Services Using Kano Model [Case Study: Minoodasht Municipality]. 2017.
- WHO. World Health Organization, Coronavirus disease [COVID-19]. 2020.
- Huang Y, Zhao N. Mental health burden for the public affected by the COVID-19 outbreak in China: Who will be the high-risk group? *Psychol Health Med* 2021;26:23-34.
- Rogers JP, Chesney E, Oliver D, Pollak TA, McGuire P, Fusar-Poli P, *et al.* Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: A systematic review and meta-analysis with comparison to the COVID-19 pandemic. *Lancet Psychiat* 2020;7:611-27.
- Lee AM, Wong JG, McAlonan GM, Cheung V, Cheung C, Sham PC, *et al.* Stress and psychological distress among SARS survivors 1 year after the outbreak. *Can J Psychiatry* 2007;52:233-40.
- Lee SM, Kang WS, Cho A-R, Kim T, Park JK. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. *Compr Psychiatry* 2018;87:123-7.
- Wu Y, Xu X, Chen Z, Duan J, Hashimoto K, Yang L, *et al.* Nervous system involvement after infection with COVID-19 and other coronaviruses. *Brain Behav Immun* 2020;87:18-22.
- Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, *et al.* The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet* 2020;395:912-20.
- Carvalho P, Moreira M, de Oliveira M, Landim JM, Neto MLR. The psychiatric impact of the novel coronavirus outbreak. *Psychiatry Res* 2020;286:112902.
- Mowbray H. In Beijing, coronavirus 2019-nCoV has created a siege mentality. *BMJ* 2020;368:m516.
- Okoloba MM, Ogueji IA, Darroch SJ, Ogueji AM. A multinational pilot study on the lived experiences and mental health impacts from the COVID-19 pandemic. *Global Psychiatry Arch* 2020;3:211-26.
- Ministry of Health and Medical Education, Health guidelines

- for controlling the Covid-19 epidemic. Tehran2020.
14. Chen D, Song F, Tang L, Zhang H, Shao J, Qiu R, *et al.* Quarantine experience of close contacts of COVID-19 patients in China: A qualitative descriptive study. *Gen Hosp Psychiatry* 2020;66:81-8.
 15. Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, Liu S, *et al.* The experiences of health-care providers during the COVID-19 crisis in China: A qualitative study. *Lancet Glob Health* 2020;8:e790-8.
 16. Rich M, Ginsburg KR. The reason and rhyme of qualitative research: Why, when, and how to use qualitative methods in the study of adolescent health. *J Adolesc Health* 1999;25:371-8.
 17. Khodabakhshi-koolaei A. Living in home quarantine: Analyzing psychological experiences of college students during COVID-19 pandemic. *J Mil Med* 2020;22:130-8.
 18. Rahmatinejad P, Yazdi M, Khosravi Z, Shahisadrabadi F. Lived experience of patients with coronavirus [Covid-19]: A phenomenological study. *J Health Psychol Res* 2020;14:71-86.
 19. Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, *et al.* The differential psychological distress of populations affected by the COVID-19 pandemic. *Brain Behav Immun* 2020;87:49-50.
 20. Todres L. Clarifying the life-world: Descriptive phenomenology. *Qualitative research in health care*. New York, Open University Press, 2005:104-24.
 21. Mofakhar L, Seif M. The exponentially increasing rate of patients infected with COVID-19 in Iran. *Arch Iran Med* 2020;23:235-8.
 22. Ministry of Health and Medical Education, Prevention and control of Covid- 19[Corona virus] in the environment Work[General guide]. Tehran; 2020.
 23. Morrow R, Rodriguez A, King N. Colaizzi's descriptive phenomenological method. *Psychologist* 2015;28:643-4.
 24. Guba EG, Lincoln YS. *Fourth Generation Evaluation*. Sage; 1989.
 25. 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;19:349-57.
 26. Faulkner SL, Trotter SP. Theoretical saturation. *The International encyclopedia of communication research methods* 2017:1-2.
 27. Jesmi A-a, Mohammadzade-Tabrizi Z, Rad M, Hosseinzadeh-Younesi E, Pourhabib A. Lived experiences of patients with COVID-19 infection: A phenomenology study. *Med Glas (Zenica)* 2020;18:18-26.
 28. Labrague LJ, De los Santos JAA. COVID-19 anxiety among front-line nurses: Predictive role of organisational support, personal resilience and social support. *J Nurs Manag* 2020;28:1653-61.
 29. Cahapay MB. Stranded college students amid Corona virus disease 2019 pandemic: An existential phenomenology. *J Loss Trauma* 2020;25:598-604.
 30. Collins S. Statutory social workers: Stress, job satisfaction, coping, social support and individual differences. *Br J Soc Work* 2008;38:1173-93.
 31. Xiao H, Zhang Y, Kong D, Li S, Yang N. The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 [COVID-19] in January and February 2020 in China. *Med Sci Monit* 2020;26:e923549.
 32. Davidson PM, Daly J, Hancock K, Moser D, Chang E, Cockburn J. Perceptions and experiences of heart disease: A literature review and identification of a research agenda in older women. *Eur J Cardiovasc Nurs* 2003;2:255-64.
 33. Clarke DM, Cook KE, Coleman KJ, Smith GC. A qualitative examination of the experience of 'depression' in hospitalized medically ill patients. *Psychopathology* 2006;39:303-12.
 34. Mak WW, Law RW, Woo J, Cheung FM, Lee D. Social support and psychological adjustment to SARS: The mediating role of self-care self-efficacy. *Psychol Health* 2009;24:161-74.
 35. Pourahmadi M, Delavari S, Delavari S. The role of empathy in full-scale battle of medical and paramedical learners against COVID-19. *Iran J Med Sci* 2020;45:491-2.
 36. O'Keefe DJ. Elaboration Likelihood Model. In *The International Encyclopedia of Communication*, W. Donsbach (Ed.).2013.
 37. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, *et al.* A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med* 2020;382:727-33.