

# Research Article

# Perceptions of Family Caregivers in the Caring for COVID-19 Patient: Self-Sacrificing Management, Fear, and Loneliness to Protect the Patient—A Qualitative Content Analysis

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Received 9 October 2022; Revised 22 January 2023; Accepted 8 February 2023; Published 14 February 2023

Academic Editor: Tommaso Martino

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This study aimed to evaluate the perception of family caregivers in the care process of patients with COVID-19. This study was conducted on 19 family caregivers, who were selected using purposive sampling from 2021 to 2022. Unstructured interviews were used to collect data. The data were analyzed using the Kyngas conventional content analysis approach. The analysis of data led to three main themes, including unremitting efforts in physical care in the light of traditional medicine, accuracy, and intelligence in psychological attention and trying to maintain environmental health. According to the results, family caregivers provide high levels of self-sacrificing, continuous, and comprehensive, combined with fear and loneliness care in different dimensions with little or no support from the family, community, and health team.

# 1. Introduction

The COVID-19 pandemic has increased the demand for healthcare and put pressure on healthcare systems worldwide. People with severe illnesses are given priority for hospitalization [1]. There have been 645,630,482 confirmed cases of COVID-19 globally, including 6,634,816 deaths in the world and 7,560,217 confirmed cases of COVID-19 with 144,658 deaths in Iran based on the report of the World Health Organization (WHO) on 13 December 2022 [2]. The World Health Organization (WHO) also recommended patients with mild symptoms and no risk factors are managed at home to be cared for by family members and healthcare providers or public health staff should maintain contact with the family caregiver during home care, i.e., until the patient's symptoms are completely resolved [3]. Home care can be the only option for people in low-income areas who are unable to access medical centers due to distance, transportation problems, financial difficulties, or cultural barriers [1]. At the same time, informal home service providers are an essential human resource that enhances community healthcare capacity, especially in an aging population and areas with below-average healthcare systems [4, 5]. Iran is an Asian country where families have a great commitment, motivation, and desire to provide high levels of patient care due to cultural traditions, religious teachings, and strong family ties [6, 7]. Home care providers are often referred as formal or informal caregivers. Most informal caregivers are family members such as spouses of the care recipient. That is why, informal caregivers are often called family caregivers, who voluntarily provide unpaid support and care for family members who cannot work independently [8]. Families are often alone with their coping strategies, and family caregivers face many problems [9]. Moreover, the lack of explicit attention of health professionals to caregivers is a severe gap in healthcare [10].

Family caregivers need to be prepared to meet the demands of their new responsibilities, including physical care and psychological, social, and spiritual support [11]. There is, however, limited research on the characteristics and challenges of informal caregivers during COVID-19 [12]. Therefore, healthcare systems and professionals should make more efforts to identify family caregivers and provide guidelines and support for complex caregivers [13]. Despite the presence and updating of care instructions by global, regional, and national health organizations, this issue is doubly important and necessary for family caregivers in COVID-19 due to the emerging and even unprepared healthcare systems. In particular, the experiences, practices, and outcomes of care for informal caregivers who have a broad burden of care are unclear. Studies in various databases have shown that very few studies have been conducted to identify the experiences of COVID-19 informal caregivers. The nurses spend most of their time with patients and their families and are heavily involved in the patient care process. Therefore, identifying and meeting social needs, assessing caregivers' preparedness, and providing appropriate and targeted interventions are appropriate [14, 15]. For example, the use of medicinal plants such as Z. multiflora (Avishan Shirazi), A. officinalis (Khatmi), H. vulgare (Jow), M. sylvestris (Panirak), M. chamomilla (Babooneh), A. sativum (Seer), G. glabra (Shirin-Bayan), and Z. officinale (Zanjabeel) among the people of Iran is very common to prevent or reduce the signs and symptoms and complications of COVID-19 [16]. But, there is a lack of information on the usefulness of these drugs and other treatments, coverage of problems with home care guidelines, and caregivers' characteristics and coping strategies in caring for a patient with COVID-19. Thus, further research can increase the understanding of these family caregivers and develop evidence-based solutions to improve the quality of their care [13]. Therefore, this study aimed to evaluate the perception of family (home) caregivers in the care process of patients with COVID-19.

#### 2. Materials and Methods

2.1. Participants and Research Environment. This study was conducted on 19 caregivers from four different provinces of Iran, who were selected using a purposive sampling method from December 2021 to March 2022. In addition, the maximum variation in terms of age, gender, educational levels, occupational status, and residential location was considered to obtain comprehensive and rich data. Two family caregivers refused to participate in the study. All who refused stated that the estimated study participation time (40-50 minutes) was too long. The inclusion criteria were having experience in caring for a patient with COVID-19, willingness to conduct interviews, presenting experiences of caring for a patient with COVID-19, and being able to communicate with the authors (Table 1). In addition, all patients were diagnosed with COVID-19 by the PCR test or lung scan or both. Also, caregivers of patients who had moderate to severe COVID-19 disease were selected.

2.2. Data Collection. The data were collected using in-depth unstructured interviews and a purposive sampling method. First, a list of the telephone number of patients diagnosed with COVID-19 disease was prepared from the city health center, and then, the contact information of home caregivers was obtained. Some participants were also selected by the snowball method. The time, place, and manner of faceto-face or telephone interviews were determined by family caregivers. All face-to-face interviews were conducted at the home of family caregivers and only in the presence of the caregiver and first author of SF.

Interviews and data collection continued until data saturation was reached. After the interviews, relevant codes were selected and placed in the sheet, and at the same time, codes were reduced according to the similarity of the participants' codes until no code was added to the datasheet and data analysis revealed no new findings or changes [17, 18]. After conducting 17 interviews, data saturation was reached and no new data were obtained, but to ensure data saturation, 2 other family caregivers were interviewed.

The interviews were conducted by asking open-ended questions to allow participants to share their experiences freely. An attempt was made to first gain the interviewee's trust by introducing themselves, the research objectives, and the method of conducting the interview. After obtaining informed consent, the demographic characteristics of the interviewee such as age, gender, educational status, marital status, and care experience were recorded. Then, the interview began with the open-ended question as follows: "How did you take care of your patient at home a closing?" Based on the answers, more specific questions were asked in line with the main research question to explore caregivers' care experiences. In addition, probe questions or clarifiers like "You mean?" "Can you explain more?" and "Can you give a practical example of this experience?" were asked. To comply with the COVID-19 hygiene standards, some interviews were conducted virtually (telephone call) by the first author and recorded after obtaining the permission and consent of the participants. The interviews lasted between 35 and 90 minutes, and the recorded interviews were immediately transcribed verbatim and reviewed frequently. Also, all the interviews were done after the patients recovered.

2.3. Data Analysis. According to the purpose of the study, the method of the current research includes the analysis of conventional content to discover the perception of family caregivers in providing care to patients with COVID-19. Conventional content analysis is able to discover people's perceptions regarding these issues [19]. Therefore, the content was written in Microsoft Office Word software after each interview and analyzed based on the content analysis of Kyngäs et al., including three steps of preparation, organization, and reporting [17]. Each interview was transcribed verbatim. Then, the text of each interview was read word for word, sentence by sentence, and paragraph by paragraph several times to get a general idea. Then, the semantic units of each interview text were identified and coded. After the total data were analyzed by the first author, the data were reviewed, analyzed, and confirmed by the second and third authors, and minor differences were corrected. In the next step, the codes were categorized according to the similarities and conceptual differences under the classes. Then, the subclasses were compared and identified based on the similarities in the primary classes. Finally, the main concept was presented. The subclasses, classes, and main concept

CORE	Category	Iheme
<ul> <li>(i) Paying close attention to the timing of the medication (p2, 4, 5, 6, 7, 1)</li> <li>(i) Using acetaminophen for fever (p3, 4, 5, 6, 7, 8, 9, 10, 14)</li> <li>(ii) Using herbal teas (ginger, thyme, green tea, mountain tea, and respiratory problems</li> <li>(iii) Using herbal teas (ginger, thyme, green tea, mountain tea, and respiratory problems</li> <li>(iii) 11, 12, 14, 15)</li> <li>(iv) Lung physiotherapy with palm for the patient (p11, 13, 14)</li> </ul>	<ul> <li>(i) Using medication cautiously</li> <li>(ii) Paying attention to preventive measures and reduce the patient's respiratory problems</li> <li>(iii) Paying close attention to herbal remedies and nutritional recommendations of traditional medicine</li> </ul>	Unremitting efforts in physical care in the traditional medicine
<ul> <li>(i) Isolation of the patient (quarantine) (p3, 4, 5, 10)</li> <li>(ii) Attention to disinfecting the home environment and furniture (p1, 3, (i) Separation of the patients and their equipment 4, 12)</li> <li>(ii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's en (ii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's en (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of toilets and baths with bleaching and alcohol (p6, 7, 8, (ii) Disinfection of equipment and the patient's end (iii) Disinfection of equipment and (ii) Disinfection of equipment and (ii) Disinfection of equipment and (ii) Disinfection of equi</li></ul>	<ul><li>(i) Separation of the patients and their equipment</li><li>(ii) Disinfection of equipment and the patient's environment</li></ul>	Efforts to maintain environmental health
<ul> <li>(i) Giving hope, mood, and reducing stress by talking, joking, and expressing good memories to distract (p5, 6, 8, 12)</li> <li>(ii) Using favorite movies and music to change the patient's mood and distraction (p7, 8, 9, 10, 14)</li> <li>(iii) Emphasis on giving the patient a spirit of resistance and hope (p1, 5, (i) Deviation of thoughts to improve the patient's mood 6, 7, 10, 18)</li> <li>(iv) Emotion control (panic, stress, anxiety, and crying) next to the patient (iv) Emotion control (panic, stress, anxiety, and crying) next to the patient (p6, 7, 8)</li> <li>(v) Improving the mental atmosphere and maintaining home silence to reduce patient stress (p1, 2, 8, 9, 13, 14)</li> </ul>	<ul><li>(i) Deviation of thoughts to improve the patient's mood</li><li>(ii) Induction of positive energy to the patient</li></ul>	Accuracy in psychological attention

TABLE 1: Themes and main categories from content analysis of the perceptions of family caregivers in caring for COVID-19 patient.

were examined by all authors to ensure a clear difference between classes and subclasses. Actually, the process of making coding, analysis, and interpretation decisions was done by three researchers. In addition, all codes, subclasses, and main classes were provided by a faculty member outside the research team, who separately confirmed the appropriateness of data analysis. The authors constantly tried to ignore their beliefs and opinions during the analysis process. In addition, a member check was used to check the validity of the results. For this purpose, the author SF shared the findings of the study with several caregivers. Participants' comments on the study results were obtained by telephone, and they confirmed that the results corresponded to their understanding of the care process [20]. The first researcher of SF used Johnson's five criteria, citing Lincoln and Cuba [21], which include the five indicators of validity, trust, verifiability, transferability, and accuracy, to confirm the reliability of the study findings.

2.4. Ethical and Research Approvals. This study was approved by the Ethics Committee of the Tarbiat Modares University of Iran (Code: IR.MODARES.REC.1399.101) which conforms to the provisions of the Declaration of Helsinki in 1995, revised 2001. Participation in the study was voluntary, and before the start of data collection, caregivers were informed that they could withdraw from the study at any time and their data would not be used. Participants were informed about the purpose and method of the study before the study. The conscious consent was obtained after explaining the study's purpose. Obtaining consent from the participants to participate in the research and publishing the results was done by the research team. All ethical measures, including honesty in presenting results, data confidentiality, and anonymity, were carefully considered.

#### 3. Results

The family caregivers included 15 women and 4 men in the age range of 20–60 and most of the caregivers were spouses. A total of 260 initial codes were extracted by analyzing the collected data from 19 interviews, which reached 175 main codes after removing duplicate codes, reviewing, and reducing the codes, as well as merging similar codes. Finally, three main themes or categories of unremitting efforts in physical care in the light of traditional medicine, accuracy in psychological attention, and trying to maintain environmental health were extracted.

A deeper analysis of these themes shows selfsacrificing management, continuous and comprehensive, combined with fear and loneliness to protect the patient. Caregivers, despite all the problems caused by factors such as the nature of the disease, unknowns, emotional, social, financial, and equipment deficiencies, as well as many fears and concerns regarding harm and threat to the patient's survival and lack of necessary preparation for the initial encounter with the disease, they did their best to take care of the patient physically, mentally, and emotionally. Caregivers use all their power and do not withhold any care from their patients. The following subclasses and related open-source codes are shown in Table 1.

3.1. Unremitting Efforts in Physical Care in the Field of Traditional Medicine. This strategy shows that family caregivers face many problems in caring for a patient with COVID-19, which makes it difficult for them to care for the patient, but they try to take care of their patient physically using different methods and traditional medical support. These physical care efforts for their patients include cautious use of medication, reducing the patient's respiratory problems and paying close attention to herbal remedies and nutritional recommendations of traditional medicine.

3.1.1. Cautious Use of Drug Therapy. Caregivers, when a patient is suffering from a disease and feels harm or threat to his survival, give medicine to the patient with the doctor's prescription and sometimes without the doctor's prescription. They pay close attention to the use of medicines by the patient 24 hours a day, with different goals of prevention, improvement, or treatment of symptoms or complications of COVID-19. For example, a caregiver said, "We were alone, which meant I could hardly get help from anyone to take care of my patient. We didn't have access to anything, but I did everything I could to take care of him. I was afraid that his condition would worsen and he would be hospitalized. I felt very tired, I didn't sleep well at night because I had a reminder every two hours to give his medicine on time." (Participant 4).

In addition to taking sedations, many caregivers use a variety of serums, supplements, and vitamins to strengthen the patient's immune system and improve weakness and complications. For example, caregivers said, "The thing that was very painful was that my father completely lost his appetite and had to take serum and supplements. It was really difficult to get serum and medicines. Anyway, I was able to get three of them at a high price. My father was so lethargic, when I poured a little serum with vitamin C and vitamin B into the serum, he became more refreshed." (Participant 13).

3.1.2. Measures to Reduce the Patient's Respiratory Problems. The occurrence of symptoms and respiratory problems in the patient is one of the main concerns of caregivers. For this reason, most caregivers are seriously trying to improve respiratory symptoms such as coughing, shortness of breath, and even hypoxia.

Caregivers in different situations resort to anything to improve the patient's cough and breathing, including changing the patient's condition, using herbal medicines such as incense and tea, chest physiotherapy, and chewing deep breathing. For example, a caregiver said, "I didn't sleep at night and I didn't rest during the day. My husband always woke up every one or two hours even at night due to cough and shortness of breath. I used to be very tired and stayed up until one o'clock in the morning to make baking soda so that my husband could sleep better. Neither of us slept well. When he coughed, I helped him to quickly fall into pronation." (Participant 6).

Some caregivers immediately place the patient in a sitting or prostrating position during shortness of breath and cough and use different methods to relieve cough or shortness of breath simultaneously. For example, a caregiver said, "When he had a coughing attack, I quickly sat down. I put a few pillows on his back. I massaged his back as if he was breathing better. I quickly went and made hot water, lemon and honey. In fact, I was taking care more than I thought of myself." (Participant 9).

3.1.3. Extensive Attention to Herbal Remedies and Nutritional Recommendations of Traditional Medicine. Many caregivers use herbal remedies and traditional medicine with different motives based on the recommendations of peer patients or their caregivers, nurses, or frequent searches of various sites, sometimes at the patient's request to save the patient's life. Caregivers use herbal remedies for various reasons, including improving various symptoms of the disease and enhancing the effect of chemical drugs in treating COVID-19. A caregiver said, "My husband was very nervous during his illness. He was restless, and I gave him lavender. He was very sick. I rubbed the mint on his forehead. I was doing all this alone, my body was in pain, I was on my feet all day long." (Participant 14).

In addition to using herbal remedies and traditional medicine, caregivers of COVID-19 patients paid special attention to nutrition with a focus on traditional medicine in improving their patients' condition. Some caregivers avoid dairy because of its side effects and cold temper based on the advice of others and even the nurse's advice to their patient. In addition, most caregivers use hot foods and avoid cold foods.

Many caregivers used a proper nutritious diet to boost the patient's immune system. A caregiver said, "I tried very hard to boost his immune system. I even made local dough, drank light tea, grilled fish and chicken, cooked vegetables like spinach, put fruit in his diet, and eliminated sweets. I prepared drinks, which made me very tired. However, I had completely forgotten about myself." (Participant 2).

3.2. Accuracy in Psychological Attention. Caregivers were aware of the importance of the patient's psychological care during the care process. They strive actively to calm the patient, reduce the patient's nervous tension and stress, and increase the patient's hope and recovery through various methods such as distraction to improve the patient's mood and induction of positive energy to the patient by recognizing the patient's characteristics and moods.

3.2.1. Deviation of Thought to Improve the Patient's Mood. Many caregivers tried to divert the patient's attention to various issues when the patient experiences symptoms of anxiety, stress, and negative emotions. Caregivers used various methods to distract the patient from making focused on the symptoms of the disease or issues of concern, such as joking with the patient, having mutual conversations, expressing pleasant memories, showing favorite movies and music, and generally paying attention to the patient's interests. In this regard, a caregiver said, "Even though my spouse did not say anything, I realized how scared he was and lost his temper. I tried to cheer him up. I was talking about other things that we made plans for later. Although I was scared, I tried to be normal to calm him down." (Participant 8).

In addition, another caregiver about the deviation of the patient's thoughts using her interests, she said,

"In general, in the era of COVID-19, your feeling of loneliness increases a hundredfold, when you think that you cannot get help from anyone, you feel empty. I used to play music for her, songs that he liked very much, happy songs, her favorite movie, books that he liked to read, and I wanted to distract her" (Participant 10, child of the patient).

3.2.2. Induction of Positive Energy to the Patient. Caregivers always tried to encourage patients to resist the symptoms and complications of the disease in the care process. They also take action, such as reminding patients to recover from a patient's severe previous illness, reminding patients of their recovery from COVID-19 disease, and improving the mental atmosphere of the home with music, scenting the room, providing enough light, and keeping quiet at home to transfer positive energy to the patient. A caregiver said, "I used to play music at home for myself and my spouse to change his mood. Despite my bad mood, I tried to keep the atmosphere alive and happy with the motivation of strengthening his spirit and giving his energy. I tried to create a calm environment for him at home. I sacrificed myself so that I could take care of his." (Participant 9).

Caregivers tried to give their patients hope and control their negative emotions with the patient to energize their patients despite their fears, anxieties, and fears about the nature of their illness and fear of losing their patients. Furthermore, caregivers did not impose an additional psychological burden on patients. A caregiver said about this, "I was giving hope to my mother and saying that this difficult situation will pass so that her heart will calm down, but I was crying all the time. I used to come to my mom and dad, I would show it with spirit and energy, then I would go to the bathroom, look at myself in front of the mirror and cry, then wash my face, take a deep breath and come out." (Participant 5).

3.3. Efforts to Maintain Environmental Health. This concept reflects the efforts of caregivers to maintain environmental health. During the care process, all or most caregivers pay special attention to the health of the care environment with three main measures, separation of the patients and their equipment, disinfection of the patients' equipment and environment, and attention to home ventilation.

3.3.1. Separation of Patients and Their Equipment. Many caregivers try to quarantine the patient in a separate room after learning of the illness to limit patient movement

around the home and minimize shared space with other family members. In addition, all the patients' utensils and belongings are removed. Sometimes, the patient's health service is even separated if possible. The caregiver said, "I separated my son's room, I also marked his dishes with lacquer, we even separated the toilet and told him to use the bathroom toilet." (Participant 2).

In many cases, caregivers separate the patient from the rest of the family and quarantine the patient. A caregiver said, "His dishes and personal belongings, for example, his toothbrush, which was next to the others' toothbrush, and I separated it. I told him to separate it from the others. He was separate from the others, he was in another room, but I cared him myself." (Participant 3).

3.3.2. Disinfection of Equipment and Surroundings of the Patient. In addition to quarantining the patients and removing their personal belongings, caregivers make great efforts to disinfect the equipment, especially the patient's utensils, dishes, toilets and baths, the patient's bedding, and even the room floor to prevent the virus from spreading and even improve the patients' symptoms by eliminating their recontact with the virus. Regarding the change of the patients' bedding to prevent the patient from becoming ill, a caregiver said, "Every day, I changed the sheets and pillows in the house because he was sweating, and his condition worsened. I threw him in bleach." (Participant 14).

In addition, caregivers of various use disinfectants and cleaners, such as alcohol, bleach, and vinegar, to clean the home, toilet, bathroom, and patient equipment to prevent the spread of the virus both in the patient and at home. They use and sometimes even go further. A caregiver said, "Every day, I cleaned the floor with my hands with water and apple cider vinegar. I sprinkled all this rose water on the sofas and mattresses. I used to burn pecans to disinfect the house. Every day I changed the mattress sheets and put them in the car at the boiling point. In terms of grooming, it was very stressful to take care of them. I kept disinfecting the house and my lungs were burning. I tried my best to take care of him as much as possible." (Participant 12).

#### 4. Discussion

This study aimed to discover the perception of family caregivers in providing care to patients with COVID-19. The results of the study showed that the caregivers of patients with COVID-19 experienced fears and worries about injury and loss due to the disease, including the rate of transmission, high severity, death, and uncertainty in the care process. In such situations, caregivers used different strategies such as self-sacrificing care, continuous and comprehensive, combined with fear and loneliness. Selfless, continuous, and comprehensive care along with fear and loneliness means that the caregivers are trying to prevent and manage the patient's physical, mental, and psychological symptoms caused by COVID-19 and previous underlying diseases and quarantine. Caregivers in this process, due to the nature of the disease, the most important of which is the severity of lethality and the

power of contagion, experience a lot of loneliness and fear due to not having a professional or nonprofessional supporter. And with all the problems caused by the disease, including lack of information, reduction of support due to the contagiousness of the disease, as well as social, financial, and equipment problems, they use all their energy and time in caring for the patient. Allande-Cussó and Barrientos-Trigo conducted a study to implement comprehensive care in patients with COVID-19 quarantine and showed that nursing professionals should use a comprehensive approach during COVID-19 epidemics considering patients' conditions to humanize care as much as possible. Therefore, it is essential to prioritize patient-centered care and implement new measures that make this possible [22]. Roca and Muhammed examined the benefits of using comprehensive health management during the Ebola outbreak in West Africa and found that a comprehensive and holistic approach is needed to address the challenges of emerging infectious diseases [23]. The caregivers in the present study also provided an overview of the patient and targeted care by assessing the patient's physical, mental, psychological, and even cultural needs and symptoms related to COVID-19 and other underlying problems and diseases. In many cases, the patient's preferences are taken into account. In addition, the analysis of the concept of comprehensive care shows that all of the patient's needs are taken into account, including their emotional, educational, and physical needs. In comprehensive care, not only are all the patient's needs met but also their culture and spiritual well-being are considered to prevent their depression, improvement of physical condition, reduction of hospital stays, and faster recovery [24]. The results of a review study also showed a holistic approach, including providing biological, psychological, social, and spiritual care, and healthcare, including preventive, curative, and rehabilitation services were considered to improve health policies during the epidemic [25]. Caregivers also used chemical or herbal remedies to reduce, alleviate, or heal patients, as well as methods such as massage, music therapy, patient dialogue, distraction, nutritional therapy, and other complementary therapies. The results examine comprehensive care including diet, exercise, yoga, music, constructive interactions, including reading or playing with patients, and herbal and traditional remedies showed that the integration of new treatments and the provision of comprehensive care significantly increase the quality of care and reduces the negative aspect of the psychological dimension of isolation in patients [26]. The results on the actions of formal caregivers for patients with COVID-19 also showed that the most important thing to deal with patient's psychological distress is to meet the patient's needs as much as possible and to promote the emotional connection between patients and caregivers and their families and providing ways to divert attention such as watching TV and listening to music [27]. In the present study, caregivers sacrificed their time, energy, financial resources, relationships, and feelings for others to care for their patients, consciously and responsibly, regardless of the consequences of 24-hour care. In addition, caregivers gave up fun activities and spending time with friends and family caring for their loved ones. In the process, caregivers experienced physical

problems such as back and leg pain, fatigue, sleep disorders, stress, financial stress due to income loss, and increased treatment and care costs. A study of family caregivers of stroke survivors showed that dedicated caregivers ignored all of their discomfort, problems, and pain and devoted themselves to caring for their patients. The caring role affected physical and psychosocial aspects, lifestyle, financing or meals, and lifestyle of family caregivers. Caregivers did not leave time for themselves and sacrificed their time for their patients [28]. Furthermore, the researchers examined the effects of caring for elderly patients with serious eye diseases on family caregivers and showed that caregivers ignore their needs and the impacts of caring on their relationships and life plans and experience significant psychological problems. The caregivers sacrificed themselves for their patients [29]. The results of Ali Akbari et al. showed that official caregivers also sacrificed their needs to actively participate in antiepidemic work and make sacrificial contributions due to their moral and professional responsibility during sudden natural disasters and infectious diseases [30]. The results of the study showed that the caregivers do not have a sense of fear and loneliness in the process of care due to lack of knowledge, lack of preparation, fear of harming the patient and his death while caring for the patient, and lack of sufficient support and companionship from others including family and official caregivers. According to the present study, in another study in Iran that investigated the experiences of caregivers of patients with COVID-19, most family caregivers stated that due to various reasons, reversal of the symptoms, the appearance of unexpected symptoms, lack of definitive treatment, and unpredictable course, and lack of sufficient information, and as a result, damage the patient experiences emotions such as fear and stress and their friends and family members avoided contacting them [31]. In a study on family caregivers of hospitalized patients with COVID-19, the results showed that family caregivers, even in the hospital environment, while caring for the patient, experienced feel fear, despondency toward caring for the patient at home [32]. In addition, in a cross-sectional study to evaluate the experiences of elderly family caregivers during the COVID-19 pandemic, the results showed that one-third of family caregivers, especially female caregivers, reported feeling lonely and worried about COVID-19 infection and unpredictable consequences of the COVID-19 pandemic [33]. Therefore, one of the factors that may make the nature of caring for family caregivers of patients with COVID-19 different and challenging due to the high contagiousness and severity of lethality is the limited access to family support resources and the professional team, which requires more attention to this issue for prevention from the occurrence of subsequent consequences for both the patient and the caregiver.

## 5. Conclusion

The results showed that caregivers with little or no support had high levels of comprehensive care in various ways. Caregivers were always by the patient's side in any situation and seeking the best care for the patient by giving up their desires and needs during quarantine, ignoring their sufferings and hardships, and prioritizing the patient's health. Self-sacrificing care, continuous and comprehensive, combined with fear and loneliness increased the quality of care and life for patients. But caring with fear and loneliness can have harmful effects on both family caregivers and the quality of care in the long term. Therefore, it is necessary for the first step to identify caregivers' understanding of this process, evaluate and support them to optimize the role of family caregivers, and maintain their health as an essential element of the healthcare system, especially in the epidemic of infectious diseases.

5.1. Study Limitations. Various sociocultural conditions in different regions of Iran may be influential in the formation and emergence of family caregivers' strategies in the care process. Although an effort was made to have maximum diversity, it was impossible to cover all the diversity in the social and cultural context of Iranian society. The next problem in Iran is that most of the caregivers are female; due to the small number of male caregivers, we could not include more male caregivers in our study.

# **Data Availability**

The datasets used to support the findings of this study are not available due to ethical restrictions and available from corresponding author upon request.

#### **Additional Points**

What Is Known about This Topic? (i) Family caregivers essentially affect the process of caring for the patient and improving care outcomes. (ii) Concerns and challenges related to COVID-19 care processes are significant for caregivers and patients. What This Paper Adds? (i) Selfsacrificing care and comprehensive, combined with fear and loneliness, increased the quality of care and life for patients. (ii) Caring with fear and loneliness during a pandemic can have harmful effects on both family caregivers and the quality of care in the long term. (iii) It is necessary to identify caregivers' understanding of the care, evaluate, and support them to optimize the role of careers as an essential element in the pandemic.

# **Ethical Approval**

This study was approved by the Ethics Committee of the Tarbiat Modares University of Iran (Code: IR.MODAR-ES.REC.1399.101) which conforms to the provisions of the Declaration of Helsinki in 1995, revised 2001.

#### Consent

Participation in the study was voluntary, and before the start of data collection, caregivers were informed that they could withdraw from the study at any time and their data would not be used. Participants were informed about the purpose and method of the study before the study. The conscious consent was obtained after explaining the study's purpose. research and publishing the results was done by the research team. All ethical measures, including honesty in presenting results, data confidentiality, and anonymity, were carefully considered.

# Disclosure

This study was one part of the PhD dissertation by the first author (SF) supported by the Tarbiat Modares University.

## **Conflicts of Interest**

The authors declare that there are no conflicts of interest.

#### **Authors' Contributions**

Data collection was performed by SF. Analysis and interpretation were performed by FA, EM, and SF. The first draft of the manuscript was written by FA and EM. All authors edited the subsequent versions of the manuscript. All authors contributed to the study's conception and design, read, and approved the final manuscript.

#### Acknowledgments

This study was supported by the Tarbiat Modares University, Tehran, Iran. The authors would like to thank all participants who shared their valuable experiences in this study.

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