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Experiences of Patients with Covid-19 from Home Care: A Qualitative Study



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Abstract		
Introduction: The demand for home care services has increased not only due to the		
increase in the elderly population but also due to consumer preference and technological		
advances that allow for the provision of sophisticated home care. Home healthcare services		
aim to help people improve their performance and live a more independent life, improve		
their well-being, and help them stay home, avoiding hospitalization. This study aimed to		
study the Experiences of patients with COVID-19 from home care in Qazvin City. Methods: A qualitative study with a conventional content analysis method was used. Ten		
participants were selected using purposeful sampling from 5 October to 25 May 2020. In-		
depth structured interviews were used to collect data. Data were analyzed by continuous		
comparative analysis using MAXQDA 10 software.		
Results: Data analysis on patients' experiences with COVID-19 specified twelve mean		
units, eight subthemes, and four themes, including Economic, Emotional, Reliability, and		
Support.		
Conclusions: All patients have common experiences in the fields of Economic,		
Emotional, Reliability, and Support. In future waves of COVID-19, or a new pandemic,		
home care holds the potential to serve as a source of overflow care when acute care settings are overburdened and patients are discharged from acute and long-term care settings.		

INTRODUCTION

The emerging phenomenon of the Covid-19 disease has affected all aspects of life worldwide. This disease is spreading rapidly all over the world. The widespread epidemic of the Covid-19 disease and its consequences has been of great concern worldwide [1]. Hospitalization and quarantine are unpleasant experiences for patients. Restriction of movement, separation from family or friends, restriction of freedom, and fear of an uncertain future are all factors that may aggravate the negative psychological impact, emotional disturbance, depression, stress, post-traumatic stress symptoms, and irritability [2]. Hospitalized patients reported a more significant impact on mobility, selfcare, and routine activities than non-hospitalized patients [3]. Home care, as one of the community-based care methods, consists of providing health and treatment services at the patient's residence. In this system, patients benefit from health and treatment

services under the supervision of doctors and nurses at their residences, and the medical staff controls the course of treatment by examining the patient [4]. Home care is one of the essential parts of healthcare services [5]. It seems that during the epidemic of Covid-19 disease, most of the attention is directed toward the problems of hospital care and the challenges of home care services are given less attention [6, 7]. Home care services can act as a supporting part of health services and reduce the burden on the health system [8]; however, our knowledge regarding the challenges of home care during the Covid-19 pandemic is minimal [9]. Paying particular attention to home care's challenges and problems can help improve health care, especially during a crisis. Caring for patients at home during the epidemic is divided into two general categories: caring for patients with Covid-19 and caring for patients without this disease [7]. Most people in the

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second group are vulnerable patients who, Due to some chronic diseases or complications due to old age, are under care at home [6]. the problems patients under care at home face are the problems and challenges related to providing health needs [10]. Meeting these needs has burdened patients and families [11]. Environmental challenges were among the other challenges that patients with Covid-19 faced at home. For example, the patient should be kept and cared for in a separate room with proper ventilation [12]. However, it was impossible to establish these conditions for all patients due to the limited space or the presence of many people at home [13]. Home care is considered one of the leading models of care to meet the medical needs of patients and vulnerable populations during the COVID-19 pandemic. As described by WHO, home care provides high-quality and cost-effective care to people [14]. Home care strategies have been adopted to reduce the pressure on the health system [15]. Studies show that home care appears to be safe and effective in caring for non-severe COVID-19 patients and those going through the acute phase. Studying alternatives to hospitalization during the COVID-19 pandemic is particularly important due to the relationship between the capacity of healthcare systems, including shortages of drugs, respiratory devices, and protective equipment [16]. Deciding between home care versus hospitalization is a big challenge for doctors, especially in countries with a lack of resources compared to a high volume of patients [17]. The shortage of human resources, physical environment, and hospital protective and medical equipment, many patients with mild to moderate symptoms of COVID-19 are pushed to home care [18]. Therefore, it is essential to understand the experiences of patients with COVID-19. Accordingly, the researchers decided to obtain patients' experiences with receiving home care services.

METHOD

Design

This qualitative study was performed conventional content analysis approach. The present study uses this method and in-depth analysis of participants' experiences of receiving cures at home

Participants

This study was performed qualitatively; the samples were selected purposefully. The participants were suffering from acute infection and had chosen home care due to the condition of the disease, or unwillingness to go to medical centers during the peak of the disease outbreak. Patients should have the conditions of home care and sick patients who need critical care should transfer to a hospital. The activity of this center was that the patients with COVID-19 were connected to the operator by dialing 115, and after providing the basic information, the mobile team visited the person's home and performed the initial examinations. Then a video call was made with the specialist doctor, and the patient's condition was described. While providing training on quarantine and isolation of the patient from other family members, the expedition team administered the medication orders issued by the doctor, recorded the vital signs, and recorded their nursing report. The visit continued daily until the patient recovered. The interviews were conducted by one of the study's main researchers who was familiar with the principles of conducting qualitative studies. The study method was through in-depth face-to-face interviews and was done individually by asking openended questions. Sampling continued until data saturation. During the interviews, all participants were reassured about the confidentiality of information participants were allowed to express their opinions or experiences freely. After the general questions, the interview in line with the purpose of the study started with an open question with the content of expressing your experience of home care.

Data Collection

Sampling was continued until saturation of the data or until no new data was extracted by continuing the interview. The average interview time was 40 to 60 minutes, depending on the participant. In order to increase safety, the researcher and the participants used masks during the interview. For data analysis, field notes were performed immediately after each interview. field notes included the interviewer's inference of the most important ideas presented in the interview, listening to the tape, handwriting the tape's content, and checking the manuscripts with the tape's content. Recording the interviews was explained to the participants and after obtaining informed consent, the interview began. At the beginning of each interview, participants were asked about their demographic information, history of specific illnesses, and how to diagnose the condition.

Data Analysis

The data analysis process was performed using the conventional qualitative content analysis method. In this method, the researcher does not use the existing theory or research to create the initial codes before starting the data analysis and searches for the meaning hidden in the data; as the analysis steps proceed, he plans the initial codes and refines them. Graneheim and Lundman's proposed steps were used to perform contractual qualitative content analysis, which included: (a) transcribing the entire interview immediately after each interview, (b) reading the entire transcribing interview to understand its content, (c) determining the meaning units and initial codes, (d) classifying similar primary codes in more comprehensive classes and (e) determining the content hidden in the data [19]. In this study, the analysis was performed based on the

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mentioned steps; i.e., immediately after each interview, their content was transcribed and typed, then the content was read several times and the initial codes were extracted, then the codes were classified based on similarities in categories and finally the concept and content of the data were extracted. MAXQDA10 software was used to manage the data. To ensure the accuracy of the data, the methods suggested by Goba and Lincoln (1994) were used [20].

Table 1. Demographic Characteristics of the Study Participants

Sex	Numbers	Percent
Female	6	60%
Male	4	40%
Age		
30-35	1	10
36-40	2	20
41-50	1	10
51-60	3	30
Up to 60	3	30
Education		
Illiterate	1	10
Elementary	2	20
Diploma	4	40
University	3	30

Table 2. Examples of the Analysis Process

Ethical Considerations

The ethics committee approved this research of Qazvin University of Medical Sciences with the code IR.QUMS.REC.1400.480 All participants were informed about the confidentiality of their personal information and were allowed to record conversations.

RESULTS

A total of 10 patients participated in this study. Participants ranged in age from 32 to 75 years. The average interview time was 40 to 60 minutes (Table 1). Data analysis on patients' experiences with COVID-19 specified twelve mean units, eight subthemes, and four themes, including Economic, Emotional, Reliability, and Support. Some quotes from participants are listed in Table 2.

Economical

Because the center providing home care and treatment services are government-owned, families pay the minimum cost for the treatment of their patients. Also, services were provided based on health insurance, which again significantly impacted reducing the treatment costs of families.

Meaning Unit	Subthemes	Themes
One of our relatives was hospitalized for a week and had. They paid money	Financial concerns	Economical
to the hospital, and after the discharge, they paid again for the purchase of		
medicine and the doctor's re-examination.		
We could use insurance to get medical and care services.	To be economical	Economical
We didnot have to pay for each visit.	To be economical	Economical
We saw many patients around us when they were in the hospital, no one	Increasing patient and family	Emotional
could see them or stay with the patient, and the patient's family was very	communication.	
worried and upset.		
We were taught how to be healthy at home so as not to cause illness to other	Reducing the families' fear of the patient.	Emotional
family members.		
We did not go to the medical center or the office to complete the treatment	Reducing the families' fear of the patient.	Emotional
and we got help from the home care team until the end of the treatment.		
We saw that the nurse received all the medication orders from the doctor,	Quality of the treatment provided.	Reliability
and the doctor saw the patient through video call and asked the patient		
questions. We were sure we were getting the proper treatment.		
To access the services of the home care team, we used to call the number of	The state of the service provider center.	Reliability
the emergency medical center, which we trusted from the beginning.		
We would introduce this center to friends and relatives.	The state of the service provider center.	Reliability
The medical team visited every day to prescribe medicine and our recovery	Response of the treatment team.	Support
status, and if we needed their immediate help, the medical team came to		
our home.		
The treatment team was in contact with us until complete recovery.	No worries about the disease remaining.	Support
We could contact them anytime we had a question.	No worries about the disease remaining.	Support

Emotional

Based on the nature of the corona disease and the need to isolate patients, and the existence of guidelines for not having companions for patients with corona, these patients were psychologically and emotionally very vulnerable. They felt more satisfied at home instead of being hospitalized.

Relyblelity

The treating doctor communicated with the treatment team through video calls and talked with the patient,

which the participants also mentioned. They called the title a factor for trusting the treatments they received. **Support**

The method of providing the services of this institution was that the care team visited the patient's house daily to provide care and prescribe medicines and provide the needed services; in the meantime, if the patient or the family needed additional care at the same time by doing the medical team was sent to the patient's home by phone. The participants valued this support and said it led to a sense of security and trust.

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DISCUSSION

This study aimed to study the Experiences of patients with COVID-19 from home care. Data analysis on patients' experiences with COVID-19 specified twelve mean units, eight subthemes, and four themes, including Economic, Emotional, Reliability, and Support. Early in the pandemic when hospitals reached capacity, Home Care became a critical source of care for COVID-19 patients and continues to be an essential source of care for recovering COVID-19 patients. Little is known about the COVID-19 patient population treated in Home Care [21].

Emotional

Various studies on other diseases show that when the patient is hospitalized and experiences an unknown environment, being away from one's family, loss of one's professional function, and exposure to unknown processes and tools can lead to the emergence of negative emotions such as stress and anxiety in the patient. Due to the physical absence of the patient's family members and their lack of presence in the hospital, which can hinder the satisfaction of the patient's fundamental need for communication in the stressful condition of the disease, the social support of the hospital personnel sets the scene for the satisfaction of this fundamental need [22]. Norouzadeh and colleagues, who investigated the experiences of patients with COVID-19 who were hospitalized in the ICU, state that: Participants express the fear of a complex and painful death by observing the death of other patients [23]. Patients with COVID in China during the spread of this disease revealed that some psychological disorders such as anxiety, fear, depression, mood changes, insomnia, and post-traumatic stress disorders had been reported with a high prevalence rate among these patients [24]. In Jamili et al.'s study, which dealt with the experiences of hospitalized patients with COVID-19, one of the experiences of these patients was fear and loneliness [24]. In this study, all participants were satisfied that they did not have to be alone in the hospital and could be treated at home.

Reliability

Caregivers were reluctant to transfer their patients to the hospital and preferred this care by accepting the risks of home care. They believed that the hospital did not provide the necessary psychological support to their patients and that the high workload of nurses prevented them from taking care of; this experience is expressed in the study of Nakhai et al. [25]. The participants in our study had a great sense of trust that the treatment team went to their homes daily to treat them. This trust has caused the continuity of communication with the treatment team. The participants said they did not go to any other center because they trusted the treatments.

Economical

In addition to the physical and physiological burden, COVID-19 has imposed a substantial financial burden on the health systems in different countries. COVID-19 disease has been associated with financial pressures imposed on patients because of hospitalization and the payment of a part of the treatment costs. In addition to the need to pay for treatment, COVID-19 seems to have imposed financial pressure on patients by depriving them of some sources of income [26]. The participants in the present study mentioned that one of the reasons for their satisfaction with the home care delivery system is its cost-effectiveness compared to hospitalization. Also, many said that because they were quarantined and receiving treatment at home, they could manage many of their jobs, and their earnings were not harmed.

Support

The participants in this study were satisfied with the support of the treatment team and stated that the treatment team visited our house daily until complete recovery. Torjesen stated in her article that Patients who leave the hospital after a stay for covid-19 are far more likely to need to be readmitted or die than the general population. The researchers said their findings emphasized that patients discharged after covid-19 were likely to pose a "substantial extra burden on healthcare. These findings suggest a need for services to support and closely monitor people following discharge from hospital with the covid-19, for example, through more frequent/active follow-up in primary care in the weeks and months following a hospitalization," concluded the researchers [27].

Studying alternatives to conventional hospitalization during the COVID-19 pandemic is of utmost importance not only due to the relationship between the healthcare systems capacity, including shortages of medications, respirators, and protective equipment with overall outcomes during the peak in each country but also because of the COVID-19 entails a sizeable economic burden that has still not yet at its fullness. Home care units are integrated, flexible, and easily scalable platforms that can be cost-efficiently adapted to high-demand situations such as the COVID-19 pandemic [16].

STRENGTHS AND LIMITATIONS

The first is that the study was performed only on patients who received home care services in Qazvin province; therefore, it is not possible to generalize the results to other areas. The second would be the risk of phenomenological reduction, where researcher biases are usually inevitable in qualitative research.

CONCLUSION

All patients have common experiences in the fields of Economic, Emotional, Reliability, and Support. In

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future waves of COVID-19, or a new pandemic, home care holds the potential to serve as a source of overflow care when acute care settings are overburdened and patients are discharged from acute and long-term care settings.

AUTHOR'S CONTRIBUTIONS

Leili Yekefallah & Sareh Mohammadi: Conceptualization, Methodology, Visualization, Investigation. Sareh Mohammadi & Abbas Ahmadi: Data curation, Writing- Original draft preparation. Sareh Mohammadi & Leili Yekefallah: Supervision, Software, Validation. Sareh Mohammadi & Abbas Ahmadi: Writing- Reviewing and Editing.

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ETHICAL CONSIDERATIONS

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CONFLICT OF INTEREST

The authors declared no potential conflict of interest for the research, authorship, or publication of this article.

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