Psychosocial care experiences of patients with COVID-19 at home in Iran: A qualitative study

Masumeh Akbarbegloo1 | Mahnaz Sanaeefar1 | Purabdollah Majid2 | Mehdi Mohammadzadeh3

1Pediatric Nursing Department, Faculty of Nursing, Khoy University of Medical Sciences, Khoy, Iran
2Nursing and Midwifery College, Tabriz University of Medical Sciences, Tabriz, Iran
3Department of Biology, Faculty of Sciences, Urmia University, Urmia, Iran

Correspondence
Mahnaz Sanaeefar, Faculty of Nursing, Khoy University of Medical Sciences, Khoy, Urmia, West Azerbaijan Province, Iran.
Email: m_sanaeefar@khoyums.ac.ir

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Abstract
Due to the onset peak of COVID-19, as well as a shortage of human resources, physical environment, protective and medical equipment in hospitals, many patients with mild to moderate symptoms of COVID-19 are pushed to home care. This condition not only raises public health concerns but also causes a number of psychosocial problems. Therefore, this study intends to examine the psychosocial experiences of patients with COVID-19 after passing the crisis stage. A qualitative study with a conventional content analysis method was used. Thirty participants were selected using purposeful sampling from Khoy Educational and Medical Centers from 20 March to 20 June 2020. In-depth semi-structured interviews were used to collect data. Data were analysed by continuous comparative analysis using MAXQDA 10 software. The concepts extracted from data analysis identified eight subthemes and three main themes. Social rejection theme includes three subthemes: ‘Insularity of the patient’, ‘Concealment’ and ‘patient as the life-threatening center’. Lack of support theme consists of three subthemes including: ‘financial concerns’, ‘non-response of the treatment team after discharge’ and ‘concerns about the persistent condition of the disease’. Efforts to gain mental peace theme has two subthemes: ‘recourse to spirituality’ and ‘strengthening hope’. According to the results of the present study, it is necessary to examine the psychological and social needs of patients. Also, by identifying high-risk groups, supportive psychological networks such as telephone, internet and on-site medical services to help patients, medical worker and others affected in overcoming psychological problems should be increased. Providing free service packages such as the Internet, free financial aid to damaged jobs and creating the necessary platforms for online shopping and payment services, as well as training on how to plan and practice rehabilitation at home for patients and family caregivers can be helpful.

KEYWORDS
COVID-19, experiences, home care, psychosocial care
1 | INTRODUCTION

The globally outbreak of COVID-19 is the third epidemic of coronavirus in the 21st century that posing serious threats to lives; the people infected with this disease out number SARS and MERS, which could be due to the late detection of an infectious agent and the transmission of the infection by asymptomatic individuals (National Health Commission of People's Republic of China, 2020). Transmission and intensity are two important factors in determining an epidemic. Therefore, the disease control strategies are guided by the combination of these two factors. Given the genetic similarities between the new coronavirus and SARS, the severity, potential for transmission and persistence of the new coronavirus make it difficult to control; therefore, late detection of the infectious agent and the potential to spread the disease from asymptomatic individuals lead to extensive spread of the new disease (Huang et al., 2020).

Globally, as of 21 November 2020, there have been 57,910,582 confirmed cases of COVID-19, including 1,377,762 deaths, reported to WHO. In Iran, from 20 to 21 November, there have been 828,377 confirmed cases of COVID-19 with 43,896 deaths and 589,025 recovered (World Health Organization, 2020). The clinical manifestations of modern coronavirus are non-specific and most patients have fever, dry cough, and about one third have shortness of breath. Some patients show other symptoms such as myalgia, headache, sore throat and diarrhoea (Chen et al., 2020). The Centers for Disease Control and Prevention (CDC) has approved a range of diseases, from mild to severe, and deaths from COVID-19 (Centers for Disease Control, 2020). Current studies have revealed that 2019-nCoV may originate from wild animals, but the exact origin remains unclear. 2019-nCoV infected patients are the main infection sources. However, we also should attach importance to asymptomatic cases which may play a critical role in the transmission process (Shen et al., 2020).

About one third of patients with acute respiratory distress syndrome require isolation and hospitalisation in the intensive care unit. This is especially true for patients with underlying conditions such as diabetes or high blood pressure (Huang et al., 2020). So far, no definitively approved vaccine or antiviral drug has been reported for COVID-19 disease. However, basic public health measures such as staying home during illness, washing hands and breathing habits, including covering the mouth and nose when sneezing and coughing, which was effective in controlling SARS, are strongly recommended to control and limit the transmission of the new disease (Chan et al., 2020).

Despite extensive epidemiological studies on the prevalence of the disease, there is little information on patient support interventions in critical situations (National Health Commission of the People’s Republic of China, 2020). A psycho-occupational study of patients with SARS showed that they were concerned about fear, loneliness, boredom, anger, quarantine and transmission to family members and friends. They also were anxious about fever and the effects of insomnia. Feelings of uncertainty and stigma were also very significant to them (Peng et al., 2010). Therefore, this disease affects people in the community at many levels, especially infected people, and causes anxiety and stress disorders (Ma et al., 2020). Anxiety-related behaviours, mood problems, sleep disorders and decline of general health are among the issues that threaten the mental health of the infected people (Zhu et al., 2020). The lack of definitive treatment for the disease exacerbates patients’ anxiety, and increases destabilizes and functional impairment (Ma et al., 2020).

Given the pandemic situation of COVID-19 disease, which has affected and paralysed almost important economic, political, social and even military aspects of all countries of the world, the discussion of the psychological effects of this viral disease on mental health of people at different levels of society is very important (Li et al., 2020).

Understanding patients’ normal emotional and behavioural responses and adapting to stress in the face of an unknown illness requires clear communication, sensitivity to individual responses to stress, interdisciplinary collaboration, credible leadership and support (Mak et al., 2010). Understanding the psychosocial experiences of patients with COVID-19 during discharge from the hospital and continuing home care increases health policymakers’ awareness of their problems to design the structure and process of care activities to improve patients’ positive experiences. It is also possible to improve the mental health of patients and their families by improving the quality of care and treatment services at the community and home level (Nishiura et al., 2009).

Due to shortage of human resources, physical environment, protective and medical equipment in hospitals, many patients with mild to moderate symptoms of COVID-19 are pushed to home care. Since in a crisis, difficult decisions are usually made under conditions of uncertainty and time constraints, such decisions must be culturally appropriate and population-sensitive. Therefore, it is important to

What is known about this topic

- Increased competence regarding psychosocial care and how to fulfil these cares are essential for delivering holistic care at home.
- Psychosocial care at home should be adjusted according to the specific problems of patients, such that patients experience security and respect in relation to the care provided.
- Coping strategies and psychological growth are important for patients to maintain mental health.

What this paper adds

- There was a kind of avoidance behaviour and public’s escape from patients that make them feel isolate and avoid social activities.
- Patients experienced financial concerns, non-response of the treatment team and concerns about the persistent condition of the disease.
- Religious behaviours and hope effect on making life meaningful and increase positive outcomes.
have an understanding of the psychological experiences of patients with COVID-19. Accordingly, the researchers decided to obtain the psychosocial experiences of patients with coronavirus after going through the crisis phase.

2 METHODS

2.1 Design

This qualitative study was performed with qualitative content analysis approach. Qualitative research methods seek to discover and understand the inner world of individuals, and since experiences constitute the structure of truth for each individual, the researcher can only discover the meaning of phenomena from people's point of view only by entering their world of experiences (Graneheim et al., 2017). In the present study, using this method and in-depth study of participants' experiences and perceptions, the post-crisis psychosocial experiences of patients with COVID-19 have been discovered.

2.2 Selection of participants

Participants were selected using purposeful sampling from Khoy Medical and Educational Centers in Iran from 20 March to 20 June 2020, until achieving saturation. The criteria for selecting participants in the study was patients with COVID-19 whose test result was positive, aware of their condition and experienced the crisis stage of the disease, crisis stage means the stage of early infection or viral response phase during which symptoms of COVID-19 infection, especially upper respiratory tract infection and its associated symptoms dominate. Therefore, the possibility of transmission to people in this stage is at its greatest extent (Siddiqi & Mehra, 2020). The exclusion criteria included a history of mental illness based on medical records and patients who again show respiratory symptoms. The study included 30 participants; with respecting maximum diversity, subjects included 24 patients, three family caregivers, two nurses and one physician.

2.3 Data collection

Individual face-to-face and semi-structured individual interviews were used to collect data. Interviews take place after patients' recovery, at the private rooms of COVID-19 Control Headquarters, where there is no or minimal employees commuting to the place, having proper ventilation and a window to the outside of the building, while maintaining a social distancing of at least 2 m with the participant, and using gloves and masks. The interviews continued until the data was saturated. Saturation happens when by continuing to collect data, the collected data are a repetition of previous data and no new information is obtained (Saunders et al., 2018). In this study, data saturation was obtained by up to 25th interviews, and five other interviews were conducted to ensure that no new data and results were available.

The interview guide was used to ensure that all topics were addressed (Appendix 1). Each interview lasted approximately 50–65 min. Before starting the interview, the purpose of the study is how to participate in the interview, and recording the interviews was explained to the participants and after obtaining informed consent, the interview began. At the beginning of each interview, participants were first asked about the demographic information, history of specific illnesses, how to diagnose the condition, and then each interview was started with general questions. The participants were asked, “What was your experience when you heard of COVID-19 disease?” “What is your experience after having COVID-19 disease?” “What problems did you experience during your illness?” “What kind of needs did you experience during your illness?” In addition, based on the answers and analysis of the data, the clarifying questions of the interview, such as “Explain to me more about this.”, “What does this mean?” were asked. Each participant was interviewed only once and all interviews were recorded by a voice-recording device (Mp3 Player & Recorder).

2.4 Data analysis

Data analysis process was performed using 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 initials codes and refines them (Graneheim et al., 2017). 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 (Graneheim & Lundman, 2004). In this study, the analysis was performed based on the mentioned steps; i.e., immediately after each interview, their content was transcribed and typed, and 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. This process was continued by a researcher as logical and feasible as possible. MAXQDA10 software was used to manage the data.

2.5 Trustworthiness

The most important task of researcher is to validate the data. Validity indicates the accuracy of the data (Kornbluh, 2015). Therefore, to validate the study, the methods proposed by Lincoln and Guba...
(1985) were used (Lincoln & Guba, 1985). To ensure the acceptability of the data, the participants’ survey was used informally during the research (Birt et al., 2016). In this way, by transcribing the text as soon as possible (on the same day of the interview) and giving it to some participants, they were asked to read the interviews and check the accuracy of their similarity with their stated experiences. In addition, for illiterate participants, the manuscripts were read by the researcher. This was done by the researcher to establish a good communication with the participants and gain their trust. To match the coding, which is in fact the stability of the data at the same time and situation (Kornbluh, 2015), two external supervisors with a PhD degree in nursing who had experience in qualitative research were requested to review the interviews and initial coding and themes. In this review, the cases in which there was a disagreement were identified, they were discussed in some meetings and finally the appropriate codes, subthemes or themes were selected with the agreement of research team.

2.6 | Ethical considerations

This study was approved by the Institutional Review Board of Khoy University of Medical Sciences (IR.KHOY.REC.1399.026). Before the study began, the managers’ approval of the sampling centres was obtained. Also, before the interviews started, the purpose of the study was explained to the participants, and their consent to participate in the study and recording of the sound was obtained. Participants were assured that the recorded material would be used without mentioning their names and details. Participants had the right to withdraw at any stage of the study.

Table 1

| Variables               | Number | %  |
|-------------------------|--------|----|
| Sex                     |        |    |
| Male                    | 13     | 44 |
| Female                  | 17     | 56 |
| Age (year)              | 44.8 (SD = 12.4) |
| Presenting symptoms and signs |        |    |
| Fever and chills        | 16     | 66.6 |
| Cough                   | 9      | 37.5 |
| Generalised weakness    | 8      | 33.3 |
| Sore throat             | 4      | 16.6 |
| Pleuritic chest pain    | 10     | 41.6 |
| Diarrhoea               | 6      | 25  |
| Muscle pain             | 7      | 29.1 |

Table 2

| Initial concepts                                      | Subthemes                                      | Themes                                      |
|-------------------------------------------------------|------------------------------------------------|---------------------------------------------|
| Isolated                                              | Insularity of the patient                      | Social rejection                            |
| Withdrawal from social relationships                 |                                               |                                             |
| Hiding the symptoms of the disease from the family to prevent anxiety | Concealment                                   |                                             |
| Hiding the disease because of the fear of those around to be infected |                                               |                                             |
| Public escape from the patient                        | Patient as the life-threatening centre         |                                             |
| Avoidance of family members from approaching the patient |                                               |                                             |
| Job Vulnerability                                     | Financial concerns                             | Lack of support                             |
| Economic hardship                                     |                                               |                                             |
| Lack of psychological support of the treatment team   | Non- response of the treatment team after discharge |                                             |
| Ignoring the patient’s care problems at home          |                                               |                                             |
| Symptoms persistence                                  | Concerns about the persistence condition of the disease |                                             |
| Belief in the incurability of the disease             |                                               |                                             |
| Trust in God                                          | Recourse to spirituality                       | Efforts to gain mental peace                |
| Vows and thanksgiving                                 |                                               |                                             |
| Believe in a better tomorrow                          | Strengthening hope                             |                                             |
| Accompanying family                                   |                                               |                                             |

3 | RESULTS

Twenty-four COVID-19 patients who met the inclusion criteria were included in the study. Demographic characteristics of participants were summarised in Table 1.

Data analysis on the psychosocial experiences of patients with COVID-19 specified eight subthemes and three themes (Table 2).
3.1 Theme one: Social rejection

Patients were constantly isolated due to quarantine and withdrawal from friends, relatives and the community. In addition, after being informed of the presence of COVID-19 patient at home, others did not communicate with families caring for the patient and avoided or rejected them for fear of the disease. This theme includes the three subthemes as described below.

3.1.1 Insularity of the patient

Participants stated that they avoided all activities and social relationships and isolated themselves at home. This subtheme included two initial concepts: ‘Isolated’ and ‘Withdrawal from social relationships’. Some quotes of participants are listed in Table 3.

3.1.2 Concealment

Patients did not show physical symptoms or problems to other members of the family to avoid worrying and tried to prevent anyone from knowing about their illness as much as possible to prevent misjudgements of those around them and used concealment as one of their strategies. This subtheme included two initial concepts: ‘Hiding the symptoms of the disease from the family to prevent anxiety’ and ‘Hiding the disease because of the fear of those around to be infected’. Some quotes of participants are listed in Table 3.

3.1.3 Patients as the life-threatening centres

Participants were concerned about the possibility of transmitting the disease to family members and others, so they limited interactions with family and community. The fear of transmitting the disease was one of the reasons people abandoned them. This subtheme included two initial concepts: ‘Public escape from the patient’ and ‘Avoidance of family members from approaching the patient’. Some quotes of participants are listed in Table 3.

3.1.4 Theme two: Lack of support

One of the main themes obtained that affected the problems of patients with COVID-19 was inadequate support of the treatment team, financial constraints and concerns about the persistent symptoms of the disease. The lack of codified programmes to support patients and their families, and the lack of health planning to support patients at home made the care system non-responsive in patients' care at home. On the other hand, some patients needed home care after discharge from the hospital and could not go to work, so the family suffered a lot of economic pressure. Also condition of the disease had a great impact on reducing the physical strength of patients, so it was difficult for patients and their families to cope with this. This theme consists of three subthemes as described below.

3.1.5 Financial concerns

The majority of patients expressed they had low income and did not have adequate financial support to continue treatment at home. Lack of financial resources, high costs of treatment and personal protective equipment, job interruptions and worries about living expenses were among the biggest obstacles to overcome the disease, especially among married people who were unemployed due to their illness. This prevented them from making financial plans and increased the financial burden on the family and the patient. This subtheme included two initial concepts: ‘Job Vulnerability’ and ‘Economic hardship’. Some quotes of participants are listed in Table 3.

3.1.6 Non-response of the treatment team after discharge

The majority of participants complained that there was no connection between the patient and family members and the treatment team after discharge. The medical team was unaware of their home care problems. In most cases, patients, along with other family members, are cared for in a shared room at home, and there is no separate room or place to keep them. Patients who have not yet been fully treated returned to their families, while the caregiver has not been given the necessary training for patient care. This caused a lot of stress and tension on the family, and in most cases, families do not know how to deal with the patient’s physical and mental problems. This subtheme included two initial concepts: ‘Lack of psychological support of the treatment team’ and ‘Ignoring the patient’s care problems at home’. Some quotes of participants are listed in Table 3.

3.1.7 Concerns about the persistent condition of the disease

Given the nature of COVID-19 disease, complete treatment of these diseases requires careful and long-term treatment management. Some symptoms may respond very quickly to a medication plan, while others may take a long time to alleviate (Sheng et al., 2019). Participants stated accelerating the patient’s discharge process without adequate oversight of how to continue treatment at home cause negative consequences for the patient and his or her family. On the other hand, some participants stated that COVID-19 is an incurable disease that affects all aspects of their lives. This sub-theme included two initial concepts: ‘Symptoms persistence’ and ‘Belief in the incurability of the disease’. Some quotes of participants are listed in Table 3.
| Subthemes                          | Initial concepts                                      | Quotes                                                                                                                                                                                                 |
|-----------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insularity of the patient         | Isolated                                              | "Our house has two separate floors. Since I was discharged from the hospital and I came home, I have been quarantined on the second floor of our house and I have not seen anyone, even my wife and children are separated from me, and only when the food is behind the door, we have a chance to talk or call each other. It was hard for me. I feel like I'm imprisoned". (Participant 3) |
|                                   |                                                       | "I was never separated from my husband. We were always together. I never went anywhere alone. But since I got this disease, my husband had to stay away from me". (Participant 23) |
|                                   |                                                       | "After two months of being quarantined at home, I was sensitive to every little thing. It's really hard to be alone in a room and just look at the door and the wall". (Participant 17) |
| Withdrawal from social relationships |                                                       | "I live with my wife and eldest son who is married. I have not seen any since I got sick, I am worried that my grandson will take me and get sick. Oh, he is small and he comes in my arms a lot. I stayed in this room all the time, no matter how much I watched TV, I was really bored, I feel like I was put in a grave that I have no connection with anyone". (Participant 6) |
|                                   |                                                       | "Every day, some neighbors secretly disinfected our hallways and doors. Everyone who saw my family quickly moved away from us, which was annoying to us. In their opinion, we seem to have low social awareness and poor health and we took the corona". (Participant 11) |
|                                   |                                                       | "I felt very lonely, yet I did not like to communicate with others, even my friends called and I refused". (Participant 14) |
| Concealment                       | Hiding the symptoms of the disease from the family to prevent anxiety | "My family didn't tell any of our relatives and neighbors about my illness because we knew that if they found out, they would harass us and change their minds about us, it was as if we were leprosy patients". (Participant 11) |
|                                   |                                                       | "Some people say that you got sick because you did not comply. But I'm sure I was very careful". (Participant 18) |
|                                   |                                                       | "My wife's family has been stigmatizing us since I became ill, and that they are weak in immunity and susceptible to disease. The stigma of illness made them feel sorry or disgusted. These issues increased my stress". (Participant 4) |
|                                   | Hiding the disease because of the fear of those around to be infected | "I am a member of a charity and I have many friends there. But since I found out my parents were sick at home, everyone has been asking me where I got the disease from. Probably someone from outside transmitted the disease to them or your parents did not comply. Their work made me bored and I decided not to tell them I got infected and they took it from me". (Participant 5) |
|                                   |                                                       | "My family hid the disease from everyone out of fear. After the neighbors found out about my illness, one of them called the emergency services to evacuate the family. They have coronas. They pollute the environment". (Participant 12) |
| Patient as the life-threatening centre | Public escape from the patient                         | Another participants said: "I went back to work after recovery, but I saw that all my colleagues were moving away from me, they even came to my office very rarely, as if they thought that the virus was everywhere and if they came close, they would get it soon. So that I would not go to work for a while". (Participant 22) |
|                                   |                                                       | "I am an employee, and if we calculate the latency period of disease, it was probably before the announcement of the disease, and I did not protect it at that time. Although I strictly complied after the announcement, it was no longer useful. Everyone blamed me for my illness and told me sarcastically that you should be more careful. Even after returning to the office, they still ran away from me". (Participant 19) |
|                                   | Avoidance of family members from approaching the patient | "My sister and brother were unaware of my illness. I told them after recovery, my sister was very scared, and every day she eats a cup of lemon juice with ginger and walks away from me so that she doesn't get sick". (Participant 8) |
|                                   |                                                       | "I have bad thoughts. I think going to my mom and dad... they're scared too and worry take the disease from me. These thoughts get on my nerves". (Participant 20) |
|                                   |                                                       | "Family members are very important; for example, my brothers and sisters are afraid that they might get sick. They just thought about themselves and quarantined me in a room, and they did not pay attention to me and did not listen to me". (Participant 7) |
| Financial concerns                | Job Vulnerability                                     | "I am manager of a private company and I stayed at home for several months, but now I have no income, I am very worried. How many of my employees should I fire? I really think this is a problem that is as dangerous as the disease and it drives a person crazy". (Participant 18) |
|                                   |                                                       | "I work in a restaurant, I do not know, maybe I got the disease from the people who came there, my boss told me that I can no longer come to work with these conditions, I returned to work after the disease got better, but my salary was halved. No one came to the restaurant to eat anymore, and even the acceptance of food for home was reduced. I have to look for a new job now because I can't make a living like this". (Participant 9) |
| Subthemes                        | Initial concepts                                                                 | Quotes                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **Economic hardship**            | “It’s been about two months since I got Corona disease and I don’t work; I think they have hired someone else instead of me in the factory. I don’t know what to do. I have all the loans and installments to pay. On the other hand, we have to think about the monthly rent of the house and the cost of our own food”. (Participant 13)                                                                                     |
|                                  | “Now, finally, it does not stay like this and this disease will end, but what will happen tomorrow? With these costs and economic problems of the people. What happens next? I think we should be more afraid of tomorrow than now”. (Participant 11)                                                                                             |
| **Non-response of the treatment team after discharge** | Lack of psychological support of the treatment team | “Well, we can’t deal with family issues because we have a lot of work to do. I accept that there is a gap between families and us. But if we want to work with families, we can’t deal with our responsibilities”. (Participant 17)                          |
|                                 | “The first time I took the test, they said I had corona and I had to be hospitalised. I said I wanted to be quarantined at home. Please tell me what to do, but I saw that no one answered my question. They were all so busy, do not pay any attention to the people who are going to be treated at home”. (Participant 10) |
|                                 | Ignoring the patient’s care problems at home | “There are strict rules in the hospital that don’t allow you to see a doctor directly, and they’re always busy. They don’t care how do I deal with problems? I have heart disease along the corona. It doesn’t matter to the doctor. When I was hospitalised, my family cried until morning because they really felt I will dead”. (Participant 25) |
|                                 |                                                                                   | “I was very scared when I found out I was taking Corona, but the medication did not work well. It was a very difficult situation. I was a little scared because I was unfamiliar with the disease, and the number of people who had recovered was very small, and I almost did not know anyone around me who had recovered, at least to get guidance from them”. (Participant 15) |
| **Concerns about the persistence condition of the disease** | Symptoms persistence | “I feel scared; I’m worried that this disease will stay in my body for the rest of my life. Now that I’ve been discharged and come home, I feel very tired and my whole muscles ache”. (Participant 23)                                                                 |
|                                 |                                                                                   | “It’s been more than a month since I got sick, early on I couldn’t breathe at all to talk. But I still do not get better, my body is so weak that I can no longer hold the glass in my hand, one day I do not have a headache and the next day I see my headache has started again”. (Participant 24) |
|                                 | Belief in the incurability of the disease | “Sometimes I feel good and sometimes I feel bad. I feel up and down. But shortness of breath is a bad thing. Shortness of breath… it seems that no matter how careful you are, this disease does not go away, it will come back and grab your collar”. (Participant 15)                                                                 |
|                                 |                                                                                   | “Although it has been three months since I recovered, I still feel tired and have muscle aches. I used to be very active and did all the work myself, but now I feel like I will never go back to those days”. (Participant 21)                                                                 |
| **Recourse to spirituality**     | Trust in God                                                                      | “Until yesterday, maybe all I could think about was finding money or buying clothes or nail polish for a party tomorrow night. But now I see how insignificant things are in my mind, when you are going to die, it does not matter how much money you have in your bank account or what nail polish you have, the important thing is to find out what you were originally created for and where your destination should be”. (Participant 12) |
|                                 | Vows and thanksgiving                                                             | “When I was sick..., I spent most of my time on the Internet and WhatsApp. Or I prayed, read Quran. I knew that God would never leave me alone and always helped me”. (Participant 2)                                                                                                                                 |
|                                 |                                                                                   | “This disease affected me a lot. I got closer to God. Talking to God calms me down and makes my heart stronger. I feel less ungrateful and I think it’s all in my best interest”. (Participant 16)                                                                                                    |
|                                 |                                                                                   | “I decided to pursue good deeds after this illness; God has been very kind to me, and I am back to life, so I have to repay God’s love”. (Participant 4)                                                                                                                                 |
| **Strengthening hope**           | Believe in a better tomorrow                                                      | “Well, it has already happened, should I regret and be sad; so what? I have to be hopeful and see what I have to do to get out of this situation. With this disease, life has changed for my family and me. But it is possible to make the situation as it was with a little bit of prudence and hope in God”. (Participant 19) |
|                                 |                                                                                   | “One should not be afraid. If God wills and the deadline has come, you will die. If you live to be in the world, you will be fine. One has to think good thoughts. Fear is useless. I thought I would get better”. (Participant 14)                                                                                                  |
|                                 |                                                                                   | “I do not think about death at all. Because of the fear of the dead brother, I do not fear myself at all. One must take care of one’s own health. The soul is very important. If I am not afraid and I hope, my body will kill these viruses little by little. One must give oneself positive energy”. (Participant 23) |
|                                 | Accompanying family                                                              | “My wife always assure me, she always comforts me that this disease is nothing, if we relying on God, all problems will be solved”. (Participant 24)                                                                                                                                 |
|                                 |                                                                                   | “My father comes with me, doctor, whenever he is at home, he pays attention to me taking my pills, following my work, calming me down, and I talk to him”. (Participant 20)                                                                                                                                 |

**TABLE 3** (Continued)
3.1.8 | Theme three: Efforts to gain mental peace

Participants believed mental peace cause to face the problems of life with a fresh and high-spirited mentality and continue his life with hope and confidence. On the other hand, one of the points they explain was the relationship between a feeling of hope and mental health with religious attitude.

Doing religious deeds brings peace of mind, life expectancy, and social support to individuals (Behere et al., 2013). Therefore, one of the themes obtained in the present study is the efforts to gain mental peace, which has two subthemes as described below.

3.1.9 | Recourse to spirituality

Participants were instructed that charity and making vows would bring inner peace and strengthen their heart. They believed in divine destiny and were satisfied with the destiny God had given them. Many participants reported that their relationship with God became better and stronger after being in a difficult and exhausting situation. They stated that they could restore peace by praying. This sub-theme included two initial concepts: ‘Trust in God’ and ‘Vows and thanksgiving’. Some quotes of participants are listed in Table 3.

3.1.10 | Strengthening hope

Family companionship and believing in a better tomorrow made it easier to accept the problems and hardships of the disease. Some patients said that family support was very effective in strengthening their morale and made them feel that the disease would finally disappear from their lives and they would lead a natural life again with all members of the family. This subtheme included two initial concepts: ‘Believe in a better tomorrow’ and ‘Accompanying family’. Some quotes of participants are listed Table 3.

4 | DISCUSSION

The aim of this study was to explain the psychosocial experiences of patients with COVID-19 after Going through the Crisis. Based on the experiences of the participants, ‘social rejection’ is one of the main themes of the present study. This theme includes three subcategories of ‘Isolation of the patient’, ‘Concealment’ and ‘patient as the life-threatening centre’. According to the results of the present study, patients should observe home quarantine after discharge from the hospital, and this had caused them to feel isolated and away from social activities. There was a kind of avoidance behaviour by those around them, fear of getting sick, misconceptions and the public’s escape from patients with COVID-19 even after the patient recovered and he was discharged from the hospital. Therefore, the recovering people tried to conceal their medical history from the people.

In studies related to SARS, H1N1 and Ebola patients also reported experiencing stigma, abandonment and isolation (Cheng et al., 2006; Dodgson et al., 2010; Lee et al., 2005; McCauley et al., 2013; Mok et al., 2005; Schwerdtle et al., 2017; Siu et al., 2007). There was a sense of abandonment, isolation, stigma and discrimination in SARS survivors as they moved away from health care (Mok et al., 2005). In a sample of Taiwanese residents with SARS who were quarantined, 9.9% reported that they had experienced discrimination on the part of their family or friends (Peng et al., 2010).

The psychological problems of the patients in the present study were consistent with Rubin et al. (2020). According to this article, the most common causes of stress and psychological disorders in quarantined people due to COVID-19 disease are fear of being infected or contaminated, long quarantine and isolation, inadequate support and lack of access to medical care, enough food, and finally the fatigue and boredom caused by quarantine. All of the above cases and the addition of some unpleasant thoughts such as loneliness, stigmatisation, secrecy and denial, frustration and, to a less extent, aggression and suicidal thoughts may cause patients in quarantine to adhere to COVID-19 disease treatment and even think of quitting quarantine. Finally, quarantine conditions cause people to lose the psychological support of their family and friends, which in turn exacerbates stress and psychological distress and makes the patient feel rejected (Rubin & Wessely, 2020).

‘Lack of support’ is another major theme in the study, which has three subcategory of financial concerns, non-response of the treatment team after discharge and concerns about the persistent condition of the disease. Participants discussed the effects such as losing their jobs and incomes or not being able to go to work, which was evident among low-income jobs. Fan et al., (2020) also emphasizes the financial support of parents and families of patients with COVID-19. The results of the study showed that some people are not allowed to work during the epidemic of the disease and the online purchase of some medicines and equipment from hospitals and supermarkets, as well as the cost of transporting them exposed families to a major financial crisis (Fan et al., 2020). Therefore, patients should be supported by some health insurance companies and low-income families should be covered by various government and non-government support funds.

On the other hand, since COVID-19 disease is a new and unknown disease and in recent months after the outbreak of the disease, no effective treatment and vaccine has been found for this disease, staying home (social distance) is the most common and best strategy to prevent the spread of the disease during the outbreak of COVID-19. Accordingly, different psychological disorders may be observed among different family members during home stay. Therefore, it is necessary to provide psychological support and address the problems of patients and their families during this period. The results of a study that looked at the quality of sleep in people who had isolated themselves for 14 days during the epidemic of COVID-19 in January 2020 in China showed that sleep disorders were associated with increased anxiety and stress in these people, which can be improved by social support in these
patients (Xiao et al., 2020). Another survey conducted in early 2020 among ordinary people after the release of COVID-19 in China shows that about 4.6% of 2019 participants, who participated as online, had high levels of post-traumatic stress disorder (Sun et al., 2020). Meanwhile, some factors that affect the occurrence of psychological symptoms among people are concerns about the risk of developing disease, job condition, sources of income, as well as the lack of adequate facilities at home during quarantine and lack of adequate support of the health care system for patients after discharge (Wang et al., 2011). Therefore, in the current high-risk situation where the mental health of all members of society is at risk due to COVID-19 disease, by identifying these psychological disorders in vulnerable people and providing appropriate and targeted psychotherapy programmes and protocols, people’s mental health can be preserved at different levels of society.

In the present study, participants were concerned about the persistence of some symptoms such as headaches and muscle aches. Studies have shown that the effects of the disease remain mild for some time (Chen et al., 2020). Recent studies show that some parts of the body, such as the lungs, do not return to normal after the disease. Some research suggests that heart failure is seen in 12% of those recovering from corona. These findings confirm the claim that COVID-19 is more than a respiratory disease because it can affect the function of the heart, liver, brain, kidneys and endocrine-related systems (Rizzo, Vicelli Dalla Sega, Fortini, Marracino, Rapezzi, & Ferrari, 2020). These long-term effects cause stress in various forms such as depression, anxiety and fear. Each of these symptoms by making their effects on the mental and psychological condition of people make a person’s physical condition more difficult and intolerable (Heymann & Shindo, 2020).

On the other hand, Zhang et al., (2020) and Sun et al., (2020) confirmed that stress caused by fear and anxiety about the symptoms of COVID-19 disease is correlated with physical infections leading to reduced health, sleep quality and stress symptoms after the trauma (Sun et al., 2020; Zhang et al., 2020). The findings of Wen et al., (2020) also showed that anxiety and stress lead to physical symptoms such as high blood pressure, reduce the body’s resistance to infections and exacerbate the symptoms of patients with COVID-19 (Wen et al., 2020). Therefore, it is necessary to provide appropriate information about the symptoms of the disease, medical and protective care, the complications of the disease, as well as to identify the cause and factors that cause mental stress. It is better to provide appropriate and remote information and psychotherapy methods using up-to-date facilities such as video conferencing, online programmes, appropriate apps, and finally the telephone to instruct treatment protocols so that suitable methods are used to reduce the concerns of patients and people in the community and maintain their physical and mental health (Li et al., 2020).

Another major aspect of the study was the ‘efforts to gain mental peace’. This category had two subcategories of recourse to spirituality and strengthening hope. In fact, the participants tried to deal with COVID-19 disease through positive strategies. Research has also shown that those who use positive coping strategies reduce negative consequences and increase positive outcomes (Yanyu et al., 2020).

Meanwhile, religious behaviours and beliefs have a positive effect on making life meaningful. Behaviours such as trusting in God, worship, pilgrimage, etc. can create inner peace by creating hope and encouraging positive attitudes. Having a meaning and purpose in life, a sense of belonging to a higher source, hope for God’s help in difficult situations, benefiting from social and spiritual support, etc., are all among the methods that religious people use to suffer less damage in the face of stressful life events (Clark et al., 2018).

On the other hand, one of the points that explain the relationship between religious attitudes and mental health is the feeling of hope. Pfeiffer et al., (2018) in a community-based study on ‘The relationship between religious beliefs and actions and mental health and social function’ reported that religion influences mental health by enhancing coping with stress, creating a space for social and family support, establishing hope and happiness for positive emotions, such as a better life, life satisfaction, and happiness (Pfeiffer et al., 2018). Therefore, it can be said that hope plays the role of mental oxygen for human beings the existence of which seems necessary for survival and fighting challenges in life and this helps people to have inner determination and strong faith to face life challenges. People with high hopes will have a lot of energy, this will lead to motivation, and movement in the path of life and hopeful people will have a positive view of their future (Jinhee & Chen, 2016). Therefore, development of educational interventions based on religious attitudes, hope and mental health is recommended by the health care system to reduce patients’ stress and anxiety. In particular, the emphasis on the element of hope and trust in God, which is rooted in the Islamic beliefs of the affected people, can have a fundamental place and role in this regard. Undoubtedly, in such a process, the presence and cooperation of various people, especially expert staff, including doctors, nurses, psychologists, as well as missionaries and experts in religious affairs, is necessary in the form of a purposeful group, team and activity.

5 | STRENGTHS AND LIMITATIONS

Although this research is theoretically innovative, however, two limitations should also be considered. The first is that the study was performed only on patients referred to the Khoy Educational and Medical Centers; therefore, it is not possible to generalise the results to other areas. The second would be the risk of phenomenological reduction, where researcher biases are usually inevitable in qualitative research. The author implemented several strategies to improve credibility, transferability and validity such as bracketing to set aside any potential bias, member checking to gain participant’s validation of data and performed reflexivity throughout the study in a reflexive research journal.
6 | CONCLUSION

According to the findings of the present study, poor understanding of people about the transmitting of COVID-19 and fear of transmitting the disease to them has led to inappropriate social behaviours with patients. Public media can play an important role in informing about illnesses and replacing misconceptions with accurate information, also planning for infectious diseases, especially in the case of COVID-19. Consideration of support programmes by the government, society and health care provider has an important role in support and decreasing of mental distress of patients. Progressive relaxation techniques and emotional cognitive regulation are also the strategies for managing psychological problems in patients.

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CONFLICT OF INTEREST

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

DATA AVAILABILITY STATEMENT

No new data were generated or analyzed in support of this review.

ORCID

Masumeh Akbarbegloo https://orcid.org/0000-0002-6243-4272

REFERENCES

Behere, P. B., Das, A., Yadav, R., & Behere, A. P. (2013). Religion and mental health. Indian Journal of Psychiatry, 55, S187–S194. https://doi.org/10.4103/0019-5545.10552623

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? Qualitative Health Research, 26, 1802-1811. https://doi.org/10.1177/1049732316654870

Centers for Disease Control (CDC). (2020). https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html.

Chan, J. F. W., Yuan, S., Kok, K. H., Wang, K. K., Chu, H., Yang, J., & Xing, F. (2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: A study of a family cluster. Lancet, 395, 514–523. https://doi.org/10.1016/S0140-6736(20)30199-2

Chen, N. S., Zhou, M., Dong, X., Qu, J. M., Gong, F. Y., Han, Y., & Qiu, Y. (2020). Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: A descriptive study. Lancet, 395, 507–513. https://doi.org/10.1016/S0140-6736(20)30211-7

Cheng, C., Wong, W. M., & Tsang, K. W. (2006). Perception of benefits and costs during SARS outbreak: An 18-month prospective study. Journal of Consulting and Clinical Psychology, 74, 870–879. https://doi.org/10.1037/0022-006X.74.5.870

Clark, E. M., Huang, J., Roth, D. L., Schulz, E., Williams, B. R., & Holt, C. L. (2018). The relationship between religious beliefs and behaviors and changes in spiritual health locus of control over time in a national sample of African Americans. Mental Health, Religion & Culture, 20, 449–463. https://doi.org/10.1080/13674676.2017.1356274

Dodgson, J. E., Tarrant, M., Chee, Y. O., & Watkins, A. (2010). New mothers’ experiences of social disruption and isolation during the Severe Acute Respiratory Syndrome outbreak in Hong Kong. Nursing & Health Sciences, 12, 98–204. https://doi.org/10.1111/j.1442-280X.2010.00520.x

Fan, J., Zhou, M., Wei, L., Fu, L., Zhang, X., & Shi, Y. (2020). A qualitative study on the psychological needs of hospitalized newborns’ parents during COVID-19 outbreak in China. Iranian Journal of Pediatrics, 30, e10274. https://doi.org/10.5812/ijip.102748

Graneheim, U. H., Lindgren, B. M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. Nurse Education Today, 56, 29–34. https://doi.org/10.1016/j.nedt.2017.06.002

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. Nurse Education Today, 24, 105–112. https://doi.org/10.1016/j.nedt.2003.10.001

Heymann, D. L., & Shindo, N. (2020). Covid-19: What is next for public health? The Lancet, 395, 542–545. https://doi.org/10.1016/S0140-6736(20)30374-3

Huang, C. L., Wang, Y. M., Li, X. W., Ren, L. L., Zhao, J. P., Hu, Y., & Fan, G. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan China. Lancet, 395, 497–506. https://doi.org/10.1016/S0140-6736(20)30183-5

Jinhee, P., & Chen, R. K. (2016). Positive psychology and hope as means to recovery from mental illness. Journal of Applied Rehabilitation Counseling, 47, 34–42. https://doi.org/10.1891/00472220.47.2.34

Kornbluh, M. (2015). Combating challenges to establishing trustworthiness in qualitative research. Qualitative Research in Psychology, 12, 397–414. https://doi.org/10.1080/14780887.2015.1021941

Lee, S., Chan, L. Y., Chau, A. M., Kwok, K. P., & Kleinman, A. (2005). The experience of SARS-related stigma at Amoy Gardens. Social Science & Medicine, 61, 2038–2046. https://doi.org/10.1016/j.socscimed.2005.04.010

Li, W., Yang, Y., Liu, Z. H., Zhao, Y. J., Zhang, Q., Zhang, L., Zhang, L., Cheung, T., & Xiang, Y. T. (2020). Progression of mental health services during the COVID-19 outbreak in China. International Journal of Biological Sciences, 16, 1732–1738. https://doi.org/10.7150/ijbs.45120

Lincoln, Y. S., & Guba, E. (1985). Naturalistic inquiry. Sage.

Ma, N., Ma, H., & Li, L. (2020). Reading and analysis of the guiding principles of emergent psychological crisis intervention in the novel coronavirus pneumonia. Chinese Journal of Psychiatry, 53, e001. https://doi.org/10.3760/cma.j.issn.1006-7884.2020.00001

Mak, I. W., Chu, C. M., Pan, P. C., Yiu, M. G., Ho, S. C., & Chan, V. L. (2010). Risk factors for chronic post-traumatic stress disorder (PTSD) in sars survivors. General Hospital Psychiatry, 32, 590–598. https://doi.org/10.1016/j.genhosppsych.2010.07.007

McCaeley, M., Minsky, S., & Viswanath, K. (2013). The H1N1 pandemic: Media frames, stigmatization and coping. BMC Public Health, 13, 1471-2458. https://doi.org/10.1186/1471-2458-13-1116

Mok, E., Chung, B. P., Chung, J. W., & Wong, T. K. (2005). Risk factors for chronic post-traumatic stress disorder among SARS survivors. Psychological Medicine, 35, 43–53. https://doi.org/10.1017/S0033291704000448

National Health Commission of People’s Republic of China. (2020). Available at: https://www.nhc.gov.cn/xcs/yqfkdt/202001/a53e6df293cc4ff0b5a16df7f6b2b31.shtml.

National Health Commission of the People’s Republic of China. Guideline for psychological crisis intervention during 2019-nCoV. (2020) http://www.nhc.gov.cn/jkj/s3577/202101/6adc08b966594253b2b791be5c3b9467.
Early epidemiological assessment of the virulence of emerging infectious diseases: A case study of an influenza pandemic. *PloS One*, 4, 6852. https://doi.org/10.1371/journal.pone.0006852

Population-based post-crisis psychological distress: An example from the SARS outbreak in Taiwan. *Journal of the Formosan Medical Association*, 109, 524–532. https://doi.org/10.1016/S0929-6646(10)60087-3

The role of religious behavior in health self-management: A community-based participatory research study. *Religions*, 9, 357. https://doi.org/10.3390/rel9110357

COVID-19 in the heart and the lungs: Could we ‘Notch’ the inflammatory storm? *Basic Research in Cardiology*, 115, 31. https://doi.org/10.1007/s00395-020-0791-5

The psychological effects of quarantining a city. *BMJ*, 368, 313. https://doi.org/10.1136/bmj.m313

Experiences of Ebola survivors: Causes of distress and sources of resilience. *Prehospital and Disaster Medicine*, 32, 234–239. https://doi.org/10.1017/S1049023X17000073

Viral infection increases the risk of idiopathic pulmonary fibrosis: A meta-analysis. *Chest Journal*, 157, 1175–1187. https://doi.org/10.1016/j.chest.2019.10.032

COVID-19 illness in native and immunosuppressed states: A clinical-therapeutic staging proposal. *Journal of Heart and Lung Transplantation*, 39, 405–407. https://doi.org/10.1016/j.healun.2020.03.012

Prevalence and risk factors of acute posttraumatic stress symptoms during the COVID-19 outbreak in Wuhan, China. *Medrxiv*, 1, 112–131. https://doi.org/10.1101/2020.03.06.20032425

Prevalence and risk factors of acute posttraumatic stress symptoms during the COVID-19 outbreak in Wuhan, China. *Medrxiv*, 1, 112–131. https://doi.org/10.1101/2020.03.06.20032425

What was your experience when you had COVID-19 disease?" "What is your experience after having COVID-19 disease?"

What problems did you experience during your illness?"

What is your experience after having COVID-19 disease?"

Have you had any changes to decide utilizing mental health - related mental health care?"

How (what) do you do differently when you are ill/sick to seek your mental health compared to when you are healthy?"

What do you usually do to maintain your social interactions?"

What has been the most difficult or the most beneficial aspect of your experience?"

What do you want to tell them?"

How would you rate your mental health compared to when you are healthy?"

Example probing questions:"

Tell me the most important thing/event that has upset you recently."

What do you think about your mental health?"

What do you usually do to maintain your social interactions?"

What has been the most difficult or the most beneficial aspect of your experience?"

Have you had any changes to decide utilizing mental health - related mental health care services in society comparing when you did not have Covid-19 disease?"

How (what) do you do differently when you are ill/sick to seek your mental health compared to when you are healthy?"

Where did you obtain health-related information about COVID-19 disease?" "What source was the most helpful?" "What source was the least helpful?"

What suggestions do you have for other COVID-19 patient regarding mental health care?", "What do you want to tell them?"