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ScienceDirect

Nurs Outlook 69 (2021) 767–779

Nursing Outlook

www.nursingoutlook.org

Lived experiences of nurses providing altruistic care to patients with COVID-19

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ARTICLE INFO

Article history:
Received 17 July 2020
Received in revised form
18 March 2021
Accepted 29 March 2021
Available online May 7, 2021.

Keywords:
Nurses
Altruistic care
COVID 19
Patient
Intellectual care

ABSTRACT

Background: The difficulty of providing care to patients with COVID-19 and the extensive social changes caused by COVID-19 have made the experience of providing care to these patients unique. The present study was conducted to explore the lived experiences of nurses providing altruistic care to patients with COVID-19.

Methods: The present qualitative phenomenological study was conducted in spring 2020 on 12 nurses (8 women and 4 men) selected by purposive sampling from hospitals admitting patients with COVID-19 in Tehran, Iran. Data were collected through open, in-depth, semi-structured interviews and were analyzed using the Glaizer technique.

Findings: The lived experiences of nurses dealing with COVID-19 included: Disquietude, with subcategories including shock and the dilemma of staying or leaving; Intellectuality, with subcategories including patience, self-sacrifice, spiritual growth; Human transcendence, with subcategories including love of the profession, community's appreciation, and improving the value of nursing.

Discussion: Nurses' experience of providing patient care has a transcendental nature, such that nurses went from the usual fears to transcendence in internal and social aspects. The experience of passing through these stages took place over a short period of time, and nurses felt good about this achievement. Despite the difficult circumstances, patient care was not unpleasant for them; rather, it made them feel like a superhuman.

Cite this article: Khanjarian, F., Sadat-Hoseini, A.S., (2021, September/October). Lived experiences of nurses providing altruistic care to patients with COVID-19. Nurs Outlook, 69(5), 767–779. https://doi.org/10.1016/j.outlook.2021.03.021.

Introduction

COVID-19 was first observed in late December 2019 in Wuhan, the capital of Hubei Province in China, and rapidly spread throughout the world, including Iran. COVID-19 clearly became a global health problem after some time (Raoofi et al., 2020, Kim & Choi, 2016, Lai et al., 2020, Mardani & Pourkaveh, 2020, Panahi et al., 2020, Tavakoli et al., 2020). With a population of 20 million, nurses are the main pillar and the biggest group of healthcare professionals in the world.

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https://doi.org/10.1016/j.outlook.2021.03.021

They are therefore particularly important in the prevention, control and care of patients with COVID-19 (Kim & Choi, 2016, Lai et al., 2020, Mardani & Pourkaveh, 2020, Panahi et al., 2020, Tavakoli et al., 2020). The constant presence of nurses by the patients' bedside and their close contact with them in all the stages of treatment double the importance of exploring their experiences (Sharifi N et al., 2017, Choi et al., 2020). The difficult conditions of providing care to these patients and the quick social changes caused by the spread of this disease expose nurses to unknown and fascinating experiences (Lai et al., 2020, Li et al., 2020). Meanwhile, crises leave long-term effects on the lives of humans, and nurses are no exemption (Lai et al., 2020). In addition, the expectations from nurses grow much higher during times of crisis due to the shortage of workforce and facilities. The social crisis caused by COVID-19, people's need for services and care and the healthcare services provided in crisis-stricken circumstances all make for unique experiences for nurses (Shen et al., 2020), and investigating these experiences helps recognize the nature of the situation and understand nurses' performance in particular situations, which largely determines the quality of healthcare (Lai et al., 2020, Farsi & Azarmi, 2016, Wallace et al., 2020).

The professional responsibility of nurses is to provide care to patients, but the emotional burden and difficulty of providing care to patients with COVID-19 make this job difficult and exhaustive in some cases (Asmundson & Coronaphobia, 2020). Facing the death of patients (Neto et al., 2020), the risk of infection of oneself and one's family with this disease (Jin et al., 2020, Sun et al., 2020), and the fear of being a carrier for the community make the experience of providing nursing care to these patients special (Monique et al., 2007, Nasimi F et al., 2015, Pappa et al., 2020). In addition, this infectious phenomenon has only newly emerged, and healthcare providers need up-to-date information about it at each moment (Du et al., 2020, Saadat et al., 2020, Zamanian et al., 2020). This unstable situation makes the experience of caring even more problematic as nurses must make decisions in challenging situations. The country's particular conditions and the sanctions imposed against Iran have given complex and different dimensions to nursing care in Iran, such as the lack of equipment and medications for nursing care and patient treatment (Wen et al., 2020). Under these circumstances, the performance of Iranian nurses has defied these factors and has gone beyond the call of their professional duty to mere selflessness. Studies have shown that caring for patients leads to psychological changes in nurses (Kim & Choi, 2016, Pappa et al., 2020, Du et al., 2020). Given that some studies showed that the experiences of nurses in different situations are influenced by their values, culture, religion, and social and historical interactions, it appears that investigating nurses' experiences can help explain the different aspects of each phenomenon. Further elucidating these care experiences in different cultures and situations helps the nursing community better identify the situation and perform more efficiently in special circumstances (Farsi & Azarmi, 2016, Jin et al., 2020, Fernandez et al., 2020). It thus appears that providing care to patients with COVID-19 under difficult work conditions and sanctions is worthy of dedicated investigation. Given the uniqueness of this experience and its unknown nature, the phenomenological method was chosen as the best way to explore it. The present study was thus conducted to explain the lived experiences of nurses providing altruistic care to patients with COVID-19 using the phenomenological approach.

Materials and Methods

Study Design

We used Van Manen's interpretive phenomenology in this study due to the uniqueness of the study subject. This method provides a way of understanding others or the phenomena they experience by listening to them describe their personal views, mentality and inner world without the interference of the researcher's own interpretations and mental assumptions about the person or the phenomenon experienced.

Study Sample

This study was conducted in 2020 in Tehran, Iran, on nurses working in hospitals admitting patients with COVID-19. The participants were selected through purposive sampling by visiting the hospital wards and talking to nurses and then inviting the willing candidates to take part. The interviewer invited to 25 nurses and 12 of them accepted. The only study inclusion criterion was being a nurse with some experience of working with patients with COVID-19. The participants were selected from a diverse background in terms of age, gender and nursing work history in order to increase the generalizability of the results.

Data Collection and Interviews

Data were collected through in-depth open interviews. Interviews were conducted in a quiet off-duty place. Data collection continued until data saturation. Based on the interview guideline, before data collection, the researcher introduced herself to the nurses, briefed them about the study if needed, and asked them to sign an informed written consent form. They were ensured of the confidentiality of the data, that they could withdraw from the study at any time, and that

the results of the study would be used only for the study objectives. In the next stage, the participants were briefed on the study objectives in detail and its importance for the nursing community and their questions were answered. Furthermore, the process of the interview was explained, i.e., that further questions would be asked of the participants in addition to the main questions so as to elaborate different aspects of the study. The main question of the interview was mentioned in the third stage, and complementary questions were asked in order to obtain more in-depth experiences during the interview. Data were to be used anonymously and only for research purposes. The interviews began with the question of "Please describe your experience of providing care to patients with COVID-19". In the course of the interviews, the interviewer had a steering role and posed complementary questions such as "How did you feel in the face of these patients?", "Could you elaborate on that?", and "Which experience exactly are you describing?". At the end of the interviews, the participants were asked to talk about anything else they wanted to discuss. The duration of each interview depended on the participant's circumstances and varied from 30 to 45 minutes depending on when the data became repetitive and the answer to the questions was obtained.

Rigor/Reliability

The rigor and reliability of the qualitative part of the study were assessed using Lincoln and Guba's four criteria of dependability, credibility, confirmability, and transferability. Credibility was ensured by seeking the confirmation of the participants on the transcribed statements of their interviews and also the confirmation of the extracted codes by a psychologist, a nursing PhD, and a clinical nurse with a master's degree. For ensuring the rigor of the data, the questions were not posed in an explicit manner so as to avoid bias and the imposition of personal views on participants' answers.

The following steps were taken to confirm the accuracy of the translated data in English. First, the researcher translated the words extracted in their research into English. Then, a list of the words in Persian and English was sent to an English language expert with a PhD from an American university. Next, three professors revised the translation and their recommendations were forwarded to the translator. After the translator revised the manuscript, a native editor edited the manuscript. Then, three external reviewers examined the findings, which were modified according to their suggestions with respect to the categories and subcategories. Finally, the research team and two other colleagues with a good command of English checked the final version of the findings.

Data Analysis

The process of data analysis started with reflecting on relevant themes, both implicit and explicit, which characterized the phenomenon. Immediately after the interviews were completed, the audio recordings were transcribed into plain text verbatim. The audio recordings were listened to several times by the principal investigator, who compared them with the transcribed data. The transcribed data from the 12 interviews were read several times and compared with the audio recordings so as to become familiar with the data and to avoid errors. The data were analyzed thematically to reach the essential meaning of the experience. Van Manen (1997) has proposed three approaches to identifying themes in a phenomenological study: The holistic approach, the selective approach, and the detailed or line-by-line approach. The principal investigator used all these three approaches in this study for reaching an in-depth analysis and interpretation and to gain a deeper understanding of the lived experience of nurses about the subject. In the holistic approach, researchers view a text in its entirety to "capture its meanings" (Van Manen, 1997). A selective approach was employed to explore the themes. Each transcript was read and written down in brief. When the principal investigator was reading and re-reading the transcribed interviews, he was looking for patterns in the respondents' experiences that answered the research question, "Please describe your experience of providing care to patients with COVID-19". First, the data were extracted from the recorded scripts. The principal researcher immersed himself in the data so as to reach the essence of participants' experiences. The principal investigator took the initiative to look for words and expressions that were recurrent throughout the transcripts and were essential to the goal of the study. In the selective approach, the individual transcripts were read line by line, and statements that reflected the research question were identified. The principal investigator started a detailed line-by-line coding process by reading each sentence. This step was taken to generate a catalogue of codes used to describe what the respondents have meant to say. During all these stages, a psychologist and a nursing professor supervised the accuracy of the extracted data as the research assistants. After analyzing all the 12 transcripts, 112 codes were developed out of the entire stock of data. 22 codes were not included in the final analysis because they were distinctive and limited to one or two respondents.

The next step involved writing and rewriting to reach a good description of the phenomenon. During this stage, an elaborate description of the findings was provided so as to demonstrate the experiences of the nurses.

To obtain the best descriptions and categories, two other nurses cooperated with the research team; one of them was a faculty member with a PhD, and the other one was an experienced nurse with an MSc degree who had cared for patients with COVID-19.

The next step involved staying on track with the research question. It also involved maintaining a strong and oriented relationship with the

phenomenon. In this stage, the researchers tried to understand the nurses' own perspective in a more humane way.

The final step involved balancing the research context by checking the entire findings and referring to the analysis of the individual interviews and the entire stock of data looking for keywords, concepts, sub-categories, and categories. The researchers considered the entire data and the contextual data concurrently, so as to understand the contribution of each part to the development of the phenomenon.

Ethical Approval

This study was funded and supported by Tehran University of Medical Sciences (TUMS) with grant no: 99-1-100-47604 and ethical code: IR.TUMS.VCR.REC.1399.217

Findings

A total of 12 nurses took part in the study, including eight women and four men, who were all Muslims, had bachelor's or master's degrees in nursing, and were in the age range of 25 to 44 years and had one to 18 years of work history. (Table 1)

The lived experiences of nurses providing care to patients with COVID-19 appear to include three main stages, and passing through these stages had greatly affected the growth and transcendence of nurses and changed their views to care provision and the nursing profession and its value. The lived experiences of the nurses included: Stage one: disquietude; stage two: intellectuality; and stage three: transcendence. (Table 2)

Nurse 9: "*We were so frightened at first, and now, we are not afraid; rather, we feel for the patients*". She continued: "*My love for my job prepares me for care delivery, and I feel good when providing care*".

Nurse 5: "*I was so afraid at first and confused . . . more worried about my family*". She continued: "*I feel a lot better now. The fact that I can help the patients makes me feel good*".

Nurse 2: "*. . . My first patient was an infant. I was shocked and didn't know what to do at all. But now I act more rationally, and gradually, I've become more rational*".

In all the interviews, the nurses divided their experiences with patients with COVID-19 into different stages, which were then placed into categories and subcategories.

Stage 1: Disquietude

The categories of this stage included (1) Shock; and (2) The dilemma of staying or leaving. Shock had the following subcategories: (a) Denial; (b) Terror and (c) Anxiety. The dilemma of staying or leaving had the following subcategories: (a) Family's priority. (b) Professional duties.

a. Shock

This stage consisted of the real experiences of every human in facing and dealing with crises, and included the following subcategories: (1) Denial; (2) Terror, and (3) Anxiety in this category, the nurses did not take the illness seriously and did not believe it was a dire issue when dealing with patients with COVID-19.

One of the nurses said: "*I didn't believe it at all at first and didn't think it would come to this country until I saw a patient myself*". This issue was also evident in physicians' diagnosis and the hospital managers' treatments. The nurses stated that, at first, they did not believe their patients had COVID-19, and the officials had not initially provided them with sufficient equipment and facilities either because they also did not believe that patients with COVID-19 would be hospitalized in their wards. One nurse stated: "*It's tough these days. At first, there were very few equipment, which made it much harder. And when we asked for getting equipment, they didn't believe that COVID-19 was really here and so they gave us equipment in insufficient numbers and hardly*".

Table 1 – – Demographics of Participants

Participant	Age	Gender	Marital Status	Job	Education	Place of Residence	Nursing Work Experience
1	27	Male	Single	Nurse	Master	Tehran	2
2	44	Male	Married	Nurse	Bachelor	Tehran	18
3	28	Male	Single	Nurse	Master	Tehran	5
4	33	Female	Married	Nurse	Bachelor	Tehran	7
5	25	Female	Married	Nurse	Bachelor	Tehran	1
6	40	Female	Married	Nurse	Bachelor	Tehran	12
7	26	Female	Single	Nurse	Master	Tehran	1
8	25	Female	Single	Nurse	Master	Tehran	3
9	27	Female	Single	Nurse	Master	Tehran	1
10	28	Female	Single	Nurse	Master	Tehran	2
11	36	Male	Married	Nurse	PhD	Tehran	14
12	32	Female	Married	Nurse	Bachelor	Tehran	9

Table 2 – Categories and subcategories obtained from the analysis of the lived experiences of nurses about caring of patients with COVID19

Main categories and subcategories	
Disquietude	
Shock	Denial
	Terror
	Anxiety
Dilemma of staying or leaving	Priority of family (family concerns, family's encouragement, family's health, missing the family)
	Professional duties
Intellectuality	
Patients	Providing care in unbearable conditions
	Providing care in uncertain conditions
	Empathy
Self- sacrifice	Identification
	Soldier of health
Spiritual growth	Praying
	Ethical growth
	Being a superhuman
Human transcendence	Love of the profession
	Community's appreciation
	Improved the value of being a nurse

Nurse "*I had to take care of this kid for one shift, and I had contacted them and asked for extra nursing and protective equipment, and I was told that they would give me the equipment if I had written 'definite positive' on the patient's record and that the only thing they would provide us with was a gown. This was very funny to me. What did they mean? This patient who needs suction, should I not have the equipment?!! No goggles?*"

So, in the first encounter with the disease, nurses and even the hospital management did not believe we might get patients with COVID-19 in our wards.

Exposure to the disease with inadequate equipment and uncertain information about care and treatment pushed the nurses into the second subcategory, which was terror. In this subcategory, nurses experienced an incredible amount of terror in providing care, and although its level was not the same in all the nurses, they all acknowledged the uniqueness of this experience of terror. One of the nurses stated: "*When an infant came in coughing, well, I myself froze for a moment [after hearing the name of the disease], because it was the first time I was faced with this situation, and I had only heard about it before*".

Nurse 3: "*I was frightened and in terror and realized that the disease was very dangerous. I was very scared at first, but then found out that not everybody dies and my fear got diminished as I gained more information*".

Nurse "*My first experience with a COVID-19 patient was with someone whom everybody feared and ran away from. As a nurse, I felt bad being around him too. I was afraid*".

In this subcategory, the continuance of previous uncertainties about providing care to these patients provoked new uncertainties and the management's inaccurate understanding of the emerged problem and the community's reactions to news of the disease steered nurses toward the anxiety. In this subcategory, the formerly severe reactions became more balanced and nurses carried on with their professional duties despite their fear and concerns.

Nurse 2 argued: "*Caring for an infant with apnea was very hard, and caused us a lot of stress when something happened to them. You are so stressed when you start at first*".

Another nurse stated: "*Many of my colleagues were very stressed and even took sedatives*".

Nurse 7 said: "*No one was very keen to provide care to these patients at first, but gradually, we got more used to it. Both ourselves and the patient's company were anxious and stressed. Despite the anxiety about providing care to these patients, they were less afraid and were able to provide better patient care*".

Nurse "*We are no longer so scared, and now I even feel for the patients. I feel for patients with COVID-19 a lot more*".

Nurse "*Our fear gradually abated, and we learned how to use the equipment and take care of the tasks*".

Nonetheless, the lack of knowledge about the disease treatment and care and nurses' poor professional knowledge and experience in dealing with this disease still made them frightened and anxious about providing care to these patients.

Nurse "*I have studied so much, but I'm really sad that I can't help my patients the way I wish to*".

Nurse "*At first, the physicians and nurses were confused, and we didn't really know what to do. It was a horrible feeling*".

b. The Dilemma of Staying or Leaving

The dilemma of staying or leaving included the following subcategories:

Family's priority: This had four subsets, including the family's concerns, the family's encouragement, maintaining the family's health, and missing the family. Nurse said: "*At that moment, I wished for the sake of my family that I would not have to provide care to these patients*".

Nurse 8: "*They joked around with me in the early days when I returned home and felt that I was a COVID-19 carrier. But we got used to it after a few days and I no longer had any fear nor did my family* ".

Nurse "*I had to live away from my family at that time. I had to do that*".

In this subcategory, the first and foremost priority was the family. All the nurses stated that they were badly concerned about being a carrier and infecting their families. The fear of losing a loved one to this disease and the heavy conscience it caused were intolerable for the nurses. Some of the nurses even had this feeling about the public and expressed their concern about endangering the community's health.

Nurse "*For the sake of my parents, and if there is a 1% chance that I get infected, my entire family may be infected, and losing a loved one, the thought of it was very frightening. It may have crossed my mind for a moment to quit nursing, but then I thought that my colleagues are providing care and I can't leave them alone*".

Another nurse said: "*I was thinking about my family on the way home and about how to enter so as not to transfer the virus and not infect anyone in the taxi right now*".

Moreover, the family was heavily concerned about their nurse family member, and different experiences were formed in this respect. Some families encouraged their nurse member to quit out of the fear of getting infected and dying. Others encouraged their nurse family member to continue her professional duties despite their severe concerns. Some nurses had not told their family about their taking care of patients with COVID-19 at all and had concealed the issue.

Nurse "*I had so much stress and didn't want to say anything to my spouse to worsen his stress*".

Nurse "*I didn't tell my mother the truth about our hospital, because I knew it would worsen their stress and concerns*".

Nurse "*My mother kept telling me to leave and that I didn't need to work*".

Nurse "*My family always encouraged me and my mother said that I should fulfill my duty*".

Missing the family was another subcategory. The nurses had somewhat quarantined themselves while providing care to these patients and did not mingle with their family members a lot and always kept their distance from their family. Missing the kiss of their children as well as the supportive touch of their family was very hard and painful for the nurses.

One nurse stated: "*I wish I could cuddle and kiss my child, but I keep away from him right now for his own sake*".

Nurse "*I keep away from my family and am mostly in my room doing my own chores. I worry that they catch the disease and I be to blame*".

Professional duties: These meant performing professional duties despite the unsafe work environment, both psychologically and equipment-wise, and having a sense of responsibility and conscientious obligation.

One nurse stated: "*Because of my conscience, whatever I do, I ask myself and make sure if I have done the right thing or not. Have I handed over the patient properly at shift change or not? Many of the guys didn't show up and backed out, which made the job harder for us, as we had to provide care to more patients*".

Nurse said: "*One of the patients coughed a lot, so I went to their bedside and trained them and did my nursing duties, which proved very good for him and I knew it would be effective. I never saw the patients who recovered and were discharged, but saw mostly the patients who were intubated and this increased my sense of responsibility*". Nurse "*I am on the medical team and have responsibilities and I'm not meant to quit my job. I believe a sense of responsibility is very important. I have to accept the responsibilities that come with this job*".

Nurse "*I definitely would not choose this if it was in the early days, but not now. I'm now on this path and must carry on*".

Another nurse said: "*I'm a nurse, after all, and have responsibilities and should do my job. When you are dealing with patients, you realize that, poor things, it was not their fault; they have been infected and you should do whatever you can for them*".

In the early stages of this experience, the health teams' and especially the managers' lack of knowledge about treatment, care, and the importance of Personal Protective Equipment (PPE) had put the nurses under extra mental, emotional, and even physical pressure, and had faced them with the dilemma of staying or quitting their job. The importance of family and the nurses' love for their family, and fear of facing the patients when they did not have sufficient knowledge, experience, and equipment, had faced the nurses with a real mental and emotional dilemma: The dilemma of staying or leaving.

In general, in stage one, the nurses suffered severe emotional crises when providing care to these patients, such that, on the one hand, they shouldered the responsibility of maintaining their family's health, and on the other, they had to fulfill their professional responsibilities as well. In such circumstances, the lack of care facilities, knowledge, and experience made the situation and choosing harder for nurses. This situation creates an ongoing and difficult mental and emotional struggle for nurses.

Nevertheless, by the end of this stage, nurses had reached a relative mental stability and could control their emotions; they had accumulated greater work experience and could better take care of themselves, their family and the patients in the special circumstances of this disease.

The difficult work conditions and fear of the disease initially made the conditions difficult for nurses, but they gradually came to terms with it and became able to provide care with greater power. One nurse said: "*Nobody wished to provide care to the patients at first, but we gradually got used to it. Both ourselves and the patients' company had a lot of stress and anxiety at the beginning*".

Stage 2: Intellectuality

This stage had three categories: (a) Patience; (b) Self-sacrifice; and (c) Spiritual growth.

a. Patience

The category of patience had the following subcategories: (1) Providing care in unbearable conditions; (2) Providing care in uncertain conditions; and (3) Empathy with the patients.

Providing care in unbearable conditions: The nurses struggled with the heavy protective equipment they had to wear, which did not allow them to move, breathe, or provide services easily. One of the nurses likened wearing the equipment to living a life turned upside down, as everything had changed. Nonetheless,

the nurses' concerns and fear gradually abated as they learned when and how to use the equipment and came to terms with the conditions.

Nurse "*The tough part begins when you have to wear a space suit, which is very difficult to put on. Working with them on is just tough*".

Nurse "*Working with boots and masks and shields was truly hard; wearing these was just annoying*".

One nurse said: "*I now see life in an upside-down manner. Our work shifts and providing care with PPE on in hot weather . . . it's just too tedious. I remember I could not feel my nose the first time [because of the weight of glasses and masks]*".

Providing care in uncertain conditions: Providing care in conditions full of uncertainty, the sudden changes in the patients, and losing one's patient to the disease were the worst experiences according to the nurses. By gaining skills and knowledge, the nurses gradually acquired the necessary capabilities to provide care to these patients. The simultaneity of life and family pressures with these professional preoccupations had led to a psychological burden in some nurses.

One of the nurses stated: "*Physical fatigue can be relieved, but psychological fatigue does not go away and gets worse every day*".

Empathy with the patients and their families: The uncertain nature of the disease was not solely a burden on the nurses, but also on the patients and their families. The impossibility or, in some cases, unwillingness of the patients' families to be at the hospital, the patients' loneliness, the sudden changes in the patients' conditions, the patients dying alone while even their family had left them, the families' anxiety upon the patients' admission, the families' and the patients' undesirable treatment of the nurses due to this anxiety and confusion all made providing care to patients with COVID-19 particularly difficult. Moreover, delivering the bad news to families and the need to provide psychological support to the patients and their families showed the need for showing empathy to these groups. At first, the nurses were faced with the bad feeling of not being able to support the patients and their sudden death, lack of response to resuscitation and feeling of isolation.

A nurse expressed: "*I had a terrible feeling and no hope at all; I was somehow depressed that, as a nurse, I could not do anything for the patient. I wondered if the things I did for the patient bothered him or not, or were they pointless?*"

Nurse "*I started my job as a nurse in very dire circumstances and I liked this a lot. It feels good, and I like it, even though it's very hard and I went into a lot of trouble for it too. I feel much better now than before*".

About giving bad news to the patients, one nurse stated: "*The worst thing is when you are busy with the patients and because you yourself are so preoccupied, you easily deliver the bad news to the patient's company, without thinking how you would feel if it were you instead of the patient's company. We have not been trained at all about how to deliver bad news or never have the time to invest in the task. It's all very hard and feels horrible*".

As their care skills improved, the nurses could better adapt to the situation and were able to provide better care.

b. Self-Sacrifice

Self-sacrifice included the following subcategories: (1) Identification with the patient: (2) Soldier of health.

Identification: Most nurses stated that the patients' loneliness, being away from home, the lack of an effective treatment available for them, and the sudden nature of the illness and death made them feel like the patients were part of their family, and therefore, they cared for them as if they were family.

Nurse "*I think that these patients have no support besides us, and I feel very bad that a young patient badly needs help*".

Soldier of health: The next subcategory was being a soldier of health. All the nurses admitted that they had to fulfill their professional commitments. They viewed themselves as soldiers who had to defend public health. A number of the nurses believed that if the virus were a biological warfare, they would be soldiers defending the public against it and they could never quit their profession.

One nurse stated: "*I didn't have any bad feelings. I thought this disease was kind of a bioterrorism –a third world war. My view on it was political and I felt that our country had sent soldiers to the frontline to defend the country just as during the eight-year war with Iraq, and it was now our turn to go ahead with greater force as nurses, because it was an important war*".

By regarding themselves as soldiers defending the country, some nurses considered this job their duty and used previous models in the Iranian society to carry on with their professional responsibilities. One of the issues that made the nurses intensely proud was having a role model for this scenario and assimilating to the Sacred Defense, i.e. the 8-year war with Iraq, and the models they had in mind, which proved very helpful and supportive.

Most nurses believed that, like a soldier who has to defend the country against an enemy's attack, the community's health was endangered at the moment and they had to protect and guard it. Some nurses had found role models for themselves from the Sacred Defense period, and had assimilated themselves to a soldier who had to defend the country under those difficult conditions with a shortage of equipment.

One nurse said: "*I was one of those who were passionate about the Sacred Defense and the 8-year war. I liked to have also gone [to the war] and defended [my country]. I'm happy to have this role model right now*".

Nurse "*I just thought that, back then when people went to the war, they knew that they might get killed or return injured or not return at all. It was exactly like that now. Many of the*

staff would not come to work, many physicians took unpaid leave, and I thought to myself that those who went [to the war] back then were very strong".

For the nurses interviewed, the features of selfless care were valor in the fulfillment of duties, philanthropy, positive thinking, and volunteering to provide care. One of the nurses believed that providing this kind of care with selflessness was the result of rational and intellectual thinking. "*When we grow up and learn to think maturely, the result becomes providing care to [COVID-19] patients*".

c. Spiritual Growth

This category included the following subcategories: (1) Praying to and reliance on God; (2) Ethical growth; and (3) Being a superhuman.

Praying: Most nurses used prayers and reliance on God to deal with the difficulties of providing care. Exposure to highly uncertain medical and care situations had made the nurses realize that everything was in the hands of God. The nurses were left with very painful memories of some patients dying fast and alone, which had led them to the conclusion that life rapidly slips away, and this had changed the value of life for them.

One nurse stated: "*We did our best for the first patient, then we were informed of his death. This affected me so badly*".

Nurse "*After losing two of my patients in one day and with the third being in a critical condition, and although I felt really terrible, I felt a spiritual growth had happened to me, and realized what kind of a place the world is and what we are meant to do here. I was spiritually empowered and felt my own growth to the bones. I have experienced a great ethical growth here*".

Nurse "*I learnt what to do in crises, and this was a very good development, which made a different person out of me*".

Nurse "*Perhaps I was very easily irritated before, but now I'm a lot more patient. This was great and perhaps the best thing COVID-19 gave me*".

Dealing with such problems had improved the spiritual power of the nurses, and their philanthropy toward the patients had particularly changed. In addition to being a painful and disturbing event for the nurses, the patients' death had intensely affected their spiritual power and perspective on life.

Ethical growth: The abnormality of the current situation, enormous daily challenges, peace of mind to have fulfilled one's duties, and the unique experience of providing care to these patients had made the nurses provide the best and most ethical care in very difficult circumstances.

One nurse stated: "*I feel good now; I have grown up, I think. The care I provide is more ethical*".

Being a superhuman: Working beyond the call of professional duty, helping lonely and critical patients, enduring a heavy workload with a lot of equipment to work with, fear and concern about posing a risk to one's family, the treatment of the patients and their worried family with patience, and being away from one's own family and normal life all created a sense of empowerment in the nurses which, along with indescribable physical fatigue and yet the ability to carry on providing the best care, made them feel like a superhuman. Furthermore, identifying with martyrs and seeing the selflessness and even death of colleagues in the course of serving the patients created a special feeling of power in the nurses, who were happy to have a role-model distinguished from other countries, i.e. the martyrs of the eight-year war with Iraq. One nurse stated: "*I was worried about the news of COVID-19 and thought that I would see such events a hundred times in my lifetime, so I am prepared for a war now, let alone this*".

Another nurse said: "*Not many people have worked in the conditions we have. I feel like a superhuman and that I'm very powerful*".

Stage 3: Human Transcendence

This stage had the following categories: (1) Love of the profession; (2) Community's appreciation; and (3) Promoted value of nurses.

1. Love of the profession The care interaction between the patients and nurses, working in difficult psychological and physical conditions, and empathetic and ethical care made the nurses love their profession. Saving lives in the worst situation and supporting the patients physically and mentally have made nursing a valuable profession in the eyes of the community as well as nurses themselves. The patients' prayers for the nurses and their (as well as their families') gratitude toward the nurses, and the presence of volunteers to help nurses in hospitals made the nurses feel that their professional value had elevated in the community.

One of the nurses stated: "*The volunteers do everything they can; they disinfect things for us, bring us food, help the patients; they even arranged a Mid-Sha'ban celebration [a celebration for the birth of the last Imam of Shia] for us*".

Another nurse said: "*They brought us a lot of food and things on our shift. They have become more appreciative and I hope they stay that way*".

2. Community's appreciation Furthermore, seeing that nurses provided selfless care and were away from their own families made the public appreciative of the nursing community.

Nurse "*Overall, peoples' treatment of us has changed dramatically. They have no bad feelings, and are very thankful and very satisfied*".

3. Promoted value of nurses The nurses's concern about community's health and their happiness about the recovery of the patients raised the value and

credibility of the nursing profession across the community. Nurse said: "*Right now, they respect and thank us a lot*".

Another nurse said: "*The patients are very concerned about us getting infected by them and tell us not to get close to them; they are very appreciative and wish us God's help*".

Overall, nurses had gone through a process of professional, ethical, and spiritual growth in the course of providing care to patients with COVID-19. Initially, fear of the disease, the lack of facilities, the nurses' concerns about their own family, and the paradox of family duties and professional responsibilities had made the work conditions grueling. With their gradual empowerment and easier availability of equipment and facilities, nurses came to terms with the situation and moved toward spiritual and ethical growth in the course of care interaction with the patients. Nurses' provision of care to patients in difficult circumstances, concern about the community and patients and excellent performance at a time when they were being judged by the community elevated the value of nursing and the social appreciation of nurses. Meanwhile, nurses experienced being a superhuman who defends the community's health by modeling themselves after the Sacred Defense figures, and this experience was a professional and lasting one in which they took pride. Overall, the lived experience of nurses in dealing with COVID-19 was one of transcendence and growth, and they utilized their country's historical role-models for their selfless performance and were very proud of these models.

Discussion

Stage 1: Disquietude

The present study explored the self-sacrifice experience of nurses in providing care to patients with COVID-19. The results showed that the nurses experienced enormous anxiety and terror in the face of these patients, and although the process of this experience was unique, it did not go beyond the normal. An initial shock, denial and terror are natural in the face of crises and disasters. This result is consistent with the results of some other studies (Shen et al., 2020, Sun et al., 2020, Saadat et al., 2020, Zamanian et al., 2020).

Shen et al. reported psychological changes and problems in different psychological dimensions in nurses who provide care to patients with COVID-19. Although they did not mention their emergence and sequence in time, the nurses experienced fear and anxiety (Shen et al., 2020). Other case studies have also reported anxiety and initial concern in nurses providing care to patients with COVID-19 (Saadat et al., 2020, Zamanian et al., 2020). In a qualitative study by Sun et al., nurses reported negative psychological experiences when providing care to these patients. Although these experiences did not mention the timing of exposure to this disease, they agree with the present study in similarities of psychological problems encountered by care providers.

Meanwhile, in some studies, nurses' experiences revolved around being fully responsible for the patients' well-being"-this is my first duty in their first exposure to patients". This finding differs from the results of the present study, in which nurses had this experience in the second stage (Xiong & Peng, 2020). In this study, nurses revealed that they were very frightened in their first exposure to a patient with COVID-19, and said that they were reluctant to provide these patients with care due to their fears, but quickly managed to regain their sense of professional responsibility. Nurses appear to have been badly shocked in their first exposure, and while performing their professional duties, wished they could escape the situation, but they quickly overcame their feelings and carried on with their duties with the passage of time and as they saw the community's need for care provision.

In the cited study, the nurses discussed the 'challenges of working in COVID-19 wards' in the context of the second stage, while Iraninan nurses had faced this experience in the first stage (Xiong & Peng, 2020). It appears that the special conditions in Iran (e.g. lack of facilities due to the sanctions) could have affected the nurses' reactions. Other factors may also have been at play, such as training and moral or cultural attributes, which need further investigation.

A descriptive-analytical study conducted by Masoumi et al. in 2016 at the ICUs of Bushehr, Iran, showed that nurses were highly stressed in these wards and tolerated a great deal of anxiety compared to other jobs (M et al., 2016). Another study conducted by Fernandezet al. in 2020 showed that nurses' performance severely declines in times of crisis (Fernandez et al., 2020). Another study investigated the levels of stress in emergency unit nurses compared to nurses in other hospital wards and found that they showed higher levels of occupational stress compared to nurses in the other wards due to the highly stressful work environments that they experience (Shareinia, Khuniki, Bloochi Beydokhti, Eydi zeynabad, & Hosseini, 2018). Another study examined the factors contributing to stress in operating room nurses and found that more than half of these nurses had high levels of occupational stress and were most concerned about themselves being infected by the patients, which, in addition to physical consequences, caused fear, anxiety, and stress among the medical personnel and ultimately led to behavioral change and even job change in them (Asadi Fakhr &Asadi, 2017). According to studies, although this was not directly related to patients with COVID-19, similarities in care conditions indicate the level of psychological risks borne by nurses in providing care to these patients. Thus, further studies on the subject and the nurses are highly recommended, so that various short- and long-term

psychological dimensions in nurses exposed to these crises can be identified.

Other studies have also shown that, in the face of COVID 19, nurses experience fear and anxiety (21, 29). Nevertheless, the particular conditions of this disease and its unknown nature may largely contribute to the exacerbation of these states, since people tend to have more difficult experiences in unknown situations (Neto et al., 2020, Zhang et al., 2020). The present study showed that nurses are faced with a dilemma of staying or leaving in dealing with COVID-19, and although this dilemma emerges only out of the desire to protect their family, nurses choose to stay and carry on with their professional duties because of their professional commitments and the selfless role-models existing in the history of this country. Many studies conducted on nursing during war are perfectly indicative of this selfless spirit in providing patient care (Ravari et al., 2011).

A study investigated the effects of war on nursing changes and concluded that wars also have positive effects despite the negative effects they leave in the minds of many generations (m et al., 2015). Farsi et al. conducted a review study in 2016 to investigate the experiences of professional healthcare personnel during war and showed that most studies had reported on the relentless and selfless efforts made by this group in providing medical services to the injured despite the great pain and suffering they endured (Farsi & Azarmi, 2016). This review study also noted the professional growth following the valuable experiences of healthcare personnel in different areas, such as rescue, triage, and transfer of the injured, and also the treatment and care of those wounded by war and chemical warfare (Farsi & Azarmi, 2016). The experience of war in Iran seems to have provided nurses with good role-models in their profession and environment in which they take pride, and the selfless acts of this group in the past have created a commitment in future generations to serve their community as well.

In the 8-year Iraq-Iran war, Iran was subjected to most severe sanctions and almost had no arms, which made it difficult to fight. Despite knowing about the shortage of warfare and the possibility that they would not return alive, some people still went to war for their country and religion. They made huge sacrifices on the battlefield, and even faced the enemy with no weapons or protective equipment, were exposed to chemical attacks and fought wholeheartedly. Such sacrifices have never been forgotten in Iran, and during times of hardship in their own life, people role-model these soldiers, who protected their country with inadequate equipment and only with willpower and sacrifice. In addition to these models, healthcare providers can follow the role model of some medical team members as well, who served on the battlefield and provided care to soldiers without adequate equipment, and some of these medical team members were even martyred or suffered serious physical and mental disabilities. Thus, the nurses in the present study assimilated their conditions under the sanctions and their current shortage of equipment and medications to the wartime conditions and stated that they had made these figures their role model. These examples helped the nurses perform their duties with greater motivation when they felt they were at the crossroads of choosing whether to stay or leave their job.

Stage 2: Intellectuality

The lived experiences of nurses at the end of this stage was intellectuality. A nurse learns that what is right, rational, humane and ethical is to stay and serve the patients (Sun et al., 2020, Xiong and Peng, 2020). Studies conducted on critical situations suggest that nurses have always been providing services in such situations (Raoofi et al., 2020, Kim and Choi, 2016, Lai et al., 2020, Farsi & Azarmi, 2016, Jin et al., 2020, Sun et al., 2020, Pappa et al., 2020, Fernandez et al., 2020, Xiong & Peng, 2020, m et al., 2015). Such rationality in care exhibits itself with patience, selflessness, and spiritual growth. Some studies have shown that nurses achieve spiritual growth when they provide care services (Neto et al., 2020, Fernandez et al., 2020).

A study emphasized that spirituality is considered an important and inseparable part of the nursing profession; it is an intrinsic and inherent dimension that can encourage nurses to provide meaningful and purposeful interventions and be able to establish an honest and effective relationship with the patient and God (Ravari et al., 2011). In addition, spiritual job satisfaction can have a significant role in tolerating the hardships of the nursing profession and can make nursing procedures enjoyable (Ravari et al., 2011). In the cited study, the nurses reported that they preferred the comfort of their patients over their own and their family's, mainly because they considered this care a kind of worship and viewed patient care even above worship (Lai et al., 2020, Neto et al., 2020, Sun et al., 2020, M et al., 2016). In some cases, the nurses' belief in spiritual rewards was so influential that it made the existing problems in nursing care more tolerable (Farsi & Azarmi, 2016, Pappa et al., 2020).

Patient care is entangled with valuable concepts such as responsible care, commitment to patients' health, and selfless care. A nurse might regard patient care as service and worship and selflessly prefer saving the patients' lives over breastfeeding her own child or might leave the hospital content with a smile and prefer resolving the patients' problems over taking care of her own health and feel satisfied with it too; naturally, no satisfaction can be drawn from such acts based on conventional material equations. Nonetheless, when nurses believe in their work and take God to be the witness of their actions, not only do they not feel exhausted and worn-out about performing patient

care duties, but they also regard these acts as an opportunity to worship God and gain His contentment.

Studies have also revealed empathy and identification with patients as one of the experiences of nurses when providing nursing care (Farsi & Azarmi, 2016, Wallace et al., 2020, Pappa et al., 2020, Du et al., 2020, Xiong and Peng, 2020). Nurses' praying to and relying on God constitute a strategy for coping with problems and crises (Farmahini Farahani et al., 2012). Many studies have proposed spirituality as a way of coming to terms with stress and hardship (Raoofi et al., 2020, Lai et al., 2020, Ravari et al., 2011). In one study, Farmahini et al. reported that promoting religious beliefs is a preventive measure that helps reduce mental disorders in all the stages of life (Farmahini Farahani et al., 2012). Studies also emphasized the effectiveness of spirituality in reducing stress and anxiety (M et al., 2016, Ravari et al., 2011).

Stage 3: Human Transcendence

Finally, nurses' experience leads to their humane transcendence. Nursing theorists like Watson, Newman, and Parse argue that the outcome of providing nursing care is humane transcendence in the nurse (Fawcett and DeSanto-Madeya, 2014). Studies have also shown that the outcome of providing nursing care is the sense of human transcendence in the nurse (Farsi and Azarmi, 2016, Sun et al., 2020, Xiong and Peng, 2020, Karimi Moneghy, Zubin, Yavari, Noghredani, & Abdollahi, 2013). Although there were some similar studies on COVID-19 and nurses dealing with this disease, studies generally show that providing care in critical conditions entails particular stresses for nurses, and service providing systems should take these sources of stress into account to support and empower nurses (Sun et al., 2020, Xiong and Peng, 2020). Moreover, having historical role-models of service provision with selflessness in very critical situations further motivates nurses to provide care services in similar situations. The community's appreciation and the joining of volunteers to help out and witnessing that people come to take care of both the nurses and the patients without any professional commitment and no material remuneration increased the nurses' motivation to provide patient care. Finally, it seems that this transcendental path for nurses has been reinforced with the help of the rich nursing history of the country during the years of the war and the public mobilization in support of the country during the sanctions and has thus created a sacred view of the nursing profession in the majority of the nursing community and made the experience of being a soldier of health enjoyable and transcendental for them.

Limitations

The present study was conducted during the first days of nurses' exposure to COVID-19 patients in Iran. The peculiarities of the disease and the lack of facilities available in the early stages of the pandemic made the participants not properly cooperate with the researchers in collecting data and sampling. Therefore, purposive sampling was carried out, which meant attending wards with COVID-19 patients and interviewing the willing nurses. The findings thus cover nurses' experiences in the beginning of the pandemic in Iran. Since then, the changes developed in the number of patients admitted to hospitals, the altered access to facilities, the greater knowledge gathered of the virus, and the longer life of the virus could have also altered the experiences of nurses. Thus, it is recommended that another study be conducted on the subject to determine the effect of these changes on nurses' experiences.

Conclusion

It appears that nurses suffer many mental and psychological challenges when they are exposed to COVID-19, which ultimately leads to their growth. Although the stages or experiences of psychological change are different, most studies confirm this finding (Sun et al., 2020, Karimi Moneghy, Zubin, Yavari, Noghredani, & Abdollahi, 2013, Maben & Bridges, 2020). In fact, during critical work conditions, nurses need special mental and physical support to be able to smoothly go through this path (Fernandez et al., 2020, Maben & Bridges, 2020). It is thus the duty of psychological service providers to fulfill their social duty by supporting and helping nurses (Banerjee, 2020). The results of the present study showed that the existence of self-sacrificing role-models who protected the country and its people helped nurses adapt themselves with the difficult situation and go through humane and professional transcendence while providing services.

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