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Nurses' Challenges in Caring for Patients with COVID-19: A Qualitative Study

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Abstract

Background: Nurses who care for patients with coronavirus disease 2019 (COVID-19) face challenges in providing care for these patients. This study aimed to explain the nurses' perception of challenges in caring for patients with COVID-19.

Methods: This study was carried out using the content analysis method in 2020. In this study, 28 nurses were selected via purposive sampling. Individual and semi-structured interviews were conducted to collect the data. Data collection continued until data saturation. Content analysis was used to categorize the data and the method proposed by Elo and Kyngäs was also applied to analyze the data.

Results: Nurses' challenges were classified into three categories including organizational problems, defective communication process, and psychosocial challenges. The first category was divided into two subcategories including shortage of nurses and lack of personal protective equipment. The second category included two subcategories of defective communication with colleagues and defective communication with the patients and their families. Moreover, the third category was classified into two subcategories including psychological distress and sociocultural challenges.

Conclusion: To address the challenges of nurses in caring for patients with COVID-19, the shortage of nurses should be eliminated. Nurses need to participate in comprehensive communication skills training courses. Furthermore, it is necessary to develop educational programs and present them to the public based on the cultural context of the society.

Keywords: Caring, Coronavirus disease-2019, Nurses, Challenge, Qualitative research

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Introduction

The coronavirus disease 2019 (COVID-19) pandemic is considered the most important public health problem in the world (1) which has posed serious challenges to public health organizations all around the world (2). These challenges are not only related to caring for patients with COVID-19, but also other chronic medical conditions (3,4). In this regard, provision of care to patients with COVID-19 has placed a heavy burden on healthcare systems, and created various challenges for healthcare workers (5).

Among healthcare workers, nurses are important figures in the development of programs related to patient care principles and patients with COVID-19 need the care of nurses to avoid further complications (6,7) . Nurses are at the forefront of the fight against COVID-19, a highly infectious and deadly disease (8,9). In addition to psychological growth, nurses may also experience negative emotions, distress, exhaustion, and feelings of powerlessness (10,11). In fact, COVID-19 involves nurses in an intricate condition facing a number of complications related to patient care as providing care to a patient in an infectious setting can be very challenging. In such environments, the mental health of nurses is also endangered (12). Nurses who care for patients with COVID-19 experience severe stress (13). They also face challenges in providing care for these patients because they are in close contact with them (14). Nurses are also at risk of skin damages and pressure wounds on their faces due to the use of personal protective equipment for long

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periods of time (15).

Many studies have been conducted internationally on the care of patients with COVID-19, the provision of care during this pandemic, and the problems arising from this care. For example, the results of a study indicated Chinese nurses underwent a psychological change in the care of patients with COVID-19 and experienced ambivalence, emotional fatigue, and energy renewal (14). Moreover, psychiatric problems of nurses in Taiwan providing care to patients with COVID-19 led to uncertainty in care (16). In China, nurses caring for these patients experienced negative emotions that led to a decline in their competence (12). In Turkey, the coping strategies of nurses caring for patients with COVID-19 were attenuated and they were exposed to psychological trauma such as burnout due to exposure to the disease and loss of patients (17). The experiences of healthcare workers regarding home care in New York City showed while providing care to patients during COVID-19 crisis, healthcare workers thought they were at risk of infection and considered themselves to be unfairly marginalized and not valued during the pandemic (18).

A review of the literature revealed some psychological and occupational problems for care providers. However, the perception of Iranian nurses of the challenges of caring for patients with COVID-19 has not yet been identified. Since nurses' challenges in this regard seem to be context-based, it is better to explore these challenges using a qualitative research. In fact, the nurses' perception of challenges in caring for COVID-19 patients appears to be influenced by cultural, sociological, and contextual factors. Due to cultural differences, perceptions of affected Iranian nurses may be different from those of nurses previously studied. Since nurses are a major source of organizational knowledge in hospitals, their point of view can be important and effective (19). Therefore, exploring nurses' perceptions in this field based on their own narratives, was considered by the researcher to understand the challenges of caring for patients with COVID-19. The aim of this study was to explain the nurses' perception of challenges in caring for patients with COVID-19.

Methods

This study was conducted using content analysis. Content analysis is a method of analyzing written, audio, or visual messages on a concept. Conventional content analysis was used in this study. In conventional content analysis, there is little information about a concept, and the concept under study is identified from the textual data through categories and their names (20).

The study was conducted in general and intensive care units of two public hospitals in Iran selected for the treatment of patients with COVID-19. Eligible participants were introduced to the researchers by the head nurses of COVID-19 units. Then, the researchers were given the phone numbers of these nurses. Those nurses who had worked full time in these units were selected. Additional inclusion criteria for nurses were having at least a bachelor's degree in nursing and the desire to express their opinions. The exclusion criterion was not being willing to participate. The nurses were recruited by purposive sampling. Sampling was performed with maximum diversity (in terms of age, gender, education level, work setting, nursing work experience, and work experience in COVID-19 care) until data saturation. The nurses provided their consent about the study. A total of 28 nurses participated in this study and individual and semi-structured in-depth interviews were conducted to collect data. Due to limitations in the COVID-19 units, such as quarantine, forbidden entry and exit, potential risk of viral spread to other persons, and high workload of participants, the interviews were conducted via audio (5 nurses) and video calls (23 nurses) in WhatsApp mobile application. Prior to the interview, the researcher checked the time of the interviews with the nurses and the interviews were conducted outside nurses' working hours. Each interview lasted 35 to 45 minutes and a total of 28 interviews were conducted. The questions asked in the interviews included, "How would you describe the care of patients with COVID-19?", "What challenges do you believe affect this care?", and "What impact do you think these challenges will have on your vocation?" The interview continued with follow-up questions such as, "What do you mean by that?", "Is there anything else you want to talk about?", "Can you specify an example?", or "Could you please explain more?"

Data collection and analysis were conducted simultaneously. Based on the method proposed by Elo and Kyngäs (20), the interviews were recorded, transcribed, and then typed. The interview text was read several times to get a general understanding and then, semantic units were extracted from them. At the next step, 825 codes were obtained from the semantic units. Then, the codes were divided into subcategories based on their similarities and differences. Finally, as similar subcategories emerged, the main categories were formed (20). A sample of codes emerging during the data analysis are presented in Table 1.

The criteria of credibility, dependability, confirmability, and transferability were used to ensure the rigor of the data (21). In order to achieve credibility, a constant engagement with the subject and data was maintained, and opinions of research team about the interview process and data analysis were considered. The interview texts and findings were also given to some of the participants for confirmation. For data dependability, the opinions of an external observer, as a researcher who was familiar with qualitative research methodology but was not part of the research team, were used, achieving an agreement

on the results. For confirmability, all activities were recorded and a report on research process was prepared. For transferability, the results were discussed with two nurses, who were not part of the study and yet had the same conditions as the participants.

Results

The participants in this study aged 29-52 years and most of them were females (18 nurses). Most of the nurses had a bachelor's degree (21 nurses). In terms of work setting, 14 nurses worked in general wards. Participants' nursing work experience varied from 4 to 18 years. Moreover, their work experience in COVID-19 care ranged from 1 to 5 months (Table 2).

The results of data analysis were classified into three categories including organizational problems, defective

Table 1. A sample of codes emerging during data analysis

Categories	Subcategories	Codes
Organizational problems	Shortage of nurses	The ratio of one nurse to one patient should not be observed; Severe shortage of nursing staff
	Lack of personal protective equipment	Lack of protective clothing
Defective communication process	Defective communication with colleagues	It is difficult to work with inexperienced and unskilled nurses; Work error
	Defective communication with the patients and their families	Not having time to communicate effectively with the patient; Inadequate empathetic care provision to the patient; Not having time to communicate effectively with the family
Psychosocial challenges	Psychological distress	Nurses' fears; Nurses' worries; Nurses' death anxiety
	Sociocultural challenges	Social isolation; Cultural stigma to COVID-19 patients and nurses

Table 2. Characteristics of the participants

Age (y)	Gender	Education level	Work setting	Nursing work experience (y)	Experience related to COVID-19 care (mon)
38	Female	Bachelor's degree	General ward	10	5
49	Female	Bachelor's degree	Intensive care unit	12	4
42	Female	Master's degree	General ward	10	1
38	Male	Bachelor's degree	Intensive care unit	11	3
43	Male	Bachelor's degree	General ward	12	5
32	Female	Bachelor's degree	General ward	8	4
30	Female	Master's degree	Intensive care unit	6	3
34	Female	Bachelor's degree	General ward	5	1
29	Male	Bachelor's degree	General ward	4	2
39	Female	Bachelor's degree	Intensive care unit	10	5
41	Female	Bachelor's degree	General ward	9	4
43	Female	Master's degree	Intensive care unit	11	3
32	Male	Bachelor's degree	Intensive care unit	9	5
36	Male	Master's degree	General ward	8	4
38	Female	Bachelor's degree	Intensive care unit	9	5
35	Male	Bachelor's degree	General ward	7	2
34	Female	Bachelor's degree	Intensive care unit	10	1
42	Female	Bachelor's degree	General ward	11	4
39	Female	Bachelor's degree	Intensive care unit	9	4
44	Male	Master's degree	General ward	12	3
49	Female	Bachelor's degree	General ward	17	3
41	Female	Bachelor's degree	Intensive care unit	15	3
40	Female	Master's degree	General ward	18	5
52	Male	Bachelor's degree	General ward	18	4
36	Female	Bachelor's degree	Intensive care unit	14	5
36	Male	Master's degree	Intensive care unit	12	2
34	Female	Bachelor's degree	Intensive care unit	12	4
38	Male	Bachelor's degree	Intensive care unit	14	5

communication process, and psychosocial challenges. The category of organizational problems had two subcategories including shortage of nurses and lack of personal protective equipment. The category of defective communication process included two subcategories of defective communication with colleagues and defective communication with the patients and their families. The category of psychosocial challenges had two subcategories including psychological distress and sociocultural challenges.

Organizational problems

Nurses believed that some organizational problems, such as shortage of nurses and lack of personal protective equipment, led to challenges in caring for patients with COVID-19.

Shortage of nurses

The nurses stated that lack of nursing staff prevents the patients with COVID-19 from receiving proper care. They described this as a serious challenge in caring for these patients.

> "*In my opinion, the current situation in the care of patients is problematic. In caring for these patients, the ratio of one nurse to one patient should be observed, but this is not the case at the moment*" (Participant 3).

> "*During the time I have been working with these patients, I have realized that since we have a small number of nurses, I mean we have a severe shortage of nursing staff, we cannot fully care for these patients ... I think this is the most important challenge in caring for these patients, which can be seen in Iranian hospitals*" (Participant 16).

Lack of personal protective equipment

Nurses complained of not being provided with organizational support like having sufficient personal protective equipment, and they faced shortage of this vital resource. They believed lack of organizational support in caring for patients with COVID-19 is particularly seen in public centers.

> "*We are caring for patients who are infected and can spread the virus, and we have a duty to provide quality care for them, but unfortunately, we face a big challenge. I mean, we are not supported by the management of the organization in terms of providing personal protective equipment such as protective clothes that are popularly called spaceman clothes, not just masks and gloves*" (Participant 17).

> "*In the initial days of COVID-19, most of our healthcare managers paid attention to us and used to buy protective equipment for us. But now, this has decreased. We are working in public centers. They tell us to buy our own protection equipment. In this situation, we cannot provide good care to patients*" (Participant 9).

Defective communication process

Nurses believed the flawed communication process in patient care ultimately creates challenges in COVID care. This flawed process involved a flawed relationship with colleagues, the patients, and their families.

Defective communication with colleagues

Defective communication with colleagues referred to the communications that created challenges in patient care due to the use of inexperienced, unskilled, and incompetent nurses to care for patients with COVID-19.

> "*It is difficult to work with inexperienced and unskilled nurses in the COVID ward ...., because these nurses must be constantly reminded and controlled when working*" (Participant 5).

> "*When a low-skilled nurse works in the ward, the patient might be cared for incorrectly or errors may occur. Because he/she is not skilled, it takes time to learn the job, while by then, the patient may die and he/she has still not learned anything ... This poor performance makes our relationship in the ward challenging*" (Participant 21).

Defective communication with the patients and their families

Nurses' narrations indicated that one of the care challenges in COVID-19 was the defective communication between nurse and patients and their families. Nurses believed that factors like overcrowding or fatigue can lead to ineffective communication with a patient with COVID-19.

> "*The ward is crowded and busy, and we do not have time to communicate effectively with the patient ... For example, if the patient has a request, we respond to his request with a delay, or if he wants an explanation about his tests, we may not have the opportunity to provide him with information he wants ... This is not good and I think, I cannot communicate well with the patient*" (Participant 4).

> "*I think in COVID ward, if communication with the patient is not based on empathy and understanding, the care is not done well. But for example, due to fatigue, I may not be able to provide empathetic care to the patient, which in turn disrupts communication with the patient*" (Participant 25).

According to the nurses, communicating with the patient's family, telling them about the patient's condition, and more importantly, telling the patient about his/her eminent death negatively affect the nurse-family or nurse-patient relationship. "*It's very hard for me when I talk to the patient's family, I'm under a lot of pressure to tell the patient's family that your patient is dying. While they themselves know that COVID-19 is a deadly disease, I'm still stressed to tell them*" (Participant 10).

> "*Finally, when a patient dies, the family must be informed. Delivering the news of death to the family is*

very painful! I am very sad that I cannot do anything at that moment" (Participant 18).

Psychosocial challenges

The nurses' statements indicated that, there were some psychological, social, and cultural challenges to care for a patient with COVID-19.

Psychological distress

The nurses working in COVID-19 ward were faced with growing fears and anxiety. These fears and anxiety, which generally stemmed from a lack of safety in caring for COVID-19 patients, eventually led to death anxiety in them.

"*Every time I have a shift and every time I go to the patient's bedside, fear takes over my whole body. I am very worried, I do not feel safe and I always think that when I take care of patients, I may also get the disease*" (Participant 27).

"*The COVID nurses are very scared of dying. I have seen this among all my colleagues. There is a constant anxiety that my colleagues and I will eventually fall victim to COVID-19, and this torments me*" (Participant 6).

Sociocultural challenges

Another factor that made nurses consider the care of patients with COVID-19 a challenge was the existence of sociocultural factors. Nurses were visiting their families less, because they were staying longer in dormitories at work. They used the term social isolation in this regard.

"*Not all people see their relatives and friends, but we also have to stay in dormitories for a long time because of the high workload we have, so although I really want to see my family soon, it is really not possible ... We are different from others. We have become socially isolated*" (Participant 8).

Culture contributed to nursing care challenges for nurses by stigmatizing the care of these patients. The frequent use of the term "COVID nurse" in nurses' statements highlighted the role of culture in creating challenges in the care of COVID-19 patients.

"*Many people in our country consider COVID-19 to be similar to death and the end of life, and label the patient with COVID-19 a dead person! This attitude, which has a cultural basis, has unfortunately affected some people in the community, so they think that working with COVID-19 patients means working with the terminally ill people. This in itself is a great cultural challenge to the care we provide*" (Participant 20).

"*Everybody calls us COVID nurses, and we are known by this name among friends and relatives. In the neighborhood, people think that I have become infected myself, because of working with COVID-19 patients. Our family is considered a COVID family. It's amazing how far cultural poverty has taken root in this country. Where has the wisdom of people gone?*" (Participant 7)

Discussion

In this study, the challenges of nurses in caring for patients with COVID-19 were investigated. The participants reported the organization's management did not provide them with sufficient protective equipment and as they were working in public centers, they themselves could not afford buying the required equipment. In fact, optimal management of human resources is considered as the basic and most fundamental principle of management of the health services because manpower is the most important organizational resource (22). Similarly, a study in Africa referred to insufficient human resources and protective equipment in caring for patients with COVID-19 (23). However, these patients need care by skilled nurses who must have the necessary protective equipment (24,25).

The participants also argued that hiring inexperienced and unskilled nurses to care for patients would disrupt teamwork, create conflicts in patient care, and ultimately result in clinical error. The mentioned factors caused defective communication between nurses when providing care to the patient. Nurses also reported that conditions such as overcrowding or fatigue caused ineffective communication with the patients and lack of empathy in caring for them. In this regard, researchers stated that caregivers do not have enough time to communicate constructively with the patients when providing care to patients with COVID-19, so that there is no compassion and empathy in their relationship with the patient (26). In addition, the nurses in the present study acknowledged that communicating with the patient's family, telling them about the patient's plight, and more importantly, telling the patients about their eminent death have a negative effect on the nurse-family relationship. Considering the factors that cause defective communication and lead to challenges in the care of patients with COVID-19, it is necessary for nurses to be aware of these problems and be able to manage them using appropriate approaches. Such approaches can enhance nurses' communication skills and help them learn how to convey bad news to the families of patients with COVID-19.

The results of the present study also revealed that in caring for patients with COVID-19, nurses also suffer from psychosocial challenges. The results of a study in Africa also showed health care workers suffer from psychological stress while providing care to these patients (23). Likewise, the results of a study in Iran indicated that nurses experience a high level of stress and anxiety while caring for these types of patients (27). According to the results of a study in China, nurses are exposed to the stress and fear of infection and the stress of caring

for highly infectious patients when providing care for patients with COVID-19 (28). Findings from a study in Taiwan showed that nurses' problems in caring for COVID-19 patients are due to the care anxiety, which creates fear in nurses (16).

Due to the nature of their work, the participants visited their families, friends, and relatives less often and according to them, they were socially isolated. Similarly, healthcare workers in Africa stated that they had experienced family separation when providing care for patients with COVID-19 (23). Culture, on the other hand, played a role in creating care challenges for nurses by stigmatizing patient care. In Africa, stigma has also been associated with the care of COVID-19 patients (23). In other words, according to the participants, in the Iranian culture, COVID is considered eminent death and end of life, and caring for patients with COVID-19 is considered the care of dying people. In fact, one of the factors that had a role in the formation of cultural challenges in the care of patients with COVID-19 in this study was that people in the community have accepted this disease as the end of life and COVID-19 is culturally equivalent to death. Besides, the use of the terms such as "COVID nurse" and "COVID family", which was evident in the nurses' statements, was rooted in the cultural poverty of the community and posed another cultural challenge in caring for patients with COVID-19. According to the nurses, there was a stigmatized public image about caring for these patients. Since stigma has cultural roots, it can be suggested that the nurses participating in this study viewed this type of care with a stigmatized public image. Therefore, to overcome this cultural challenge, it is necessary to carry out culturally oriented interventions, including cultural education for members of society through social media, particularly television, which is very popular in Iran. Given that the findings of the present study revealed the role of culture in the nurses' challenges in caring for patients with COVID-19, further studies with an ethnographic approach are recommended to explain the cultural context of caring for COVID-19 patients.

According to the results of the present study, it is necessary for nursing managers to deal with organizational problems in providing quality care for COVID-19 patients and to solve the problem of shortage of nurses by recruiting sufficient and competent staff. They should also demand more funding from the Ministry of Health to provide personal protective equipment for nurses working in public centers. Moreover, nursing managers should avoid employing unskilled and inexperienced nurses in the COVID-19 ward and instead use experienced staff to care for COVID-19 patients to prevent or minimize disruptions in teamwork, professional conflicts, and the occurrence of errors in the care of patients with COVID-19. Since the nurses in this study suffered from death anxiety while providing care for patients with COVID-19 and this could impair their mental health, psychological interventions should be considered by nursing managers to promote the mental health of nurses. These interventions can be performed by psychiatric nurses or specialists for nurses caring for patients with COVID-19. Furthermore, it is necessary that nursing managers develop protocols that address these issues to reduce the challenges of COVID-19 care for nurses.

The participant enrollment method of the qualitative research restricted the generalizability of the results. In addition, this study focused on the nurses' perception of the challenges of caring for patients with COVID-19. Thus, findings of this study cannot be generalized to other healthcare workers.

Conclusion

The present study was the first qualitative study conducted on the challenges of Iranian nurses in caring for patients with COVID-19. Therefore, its results can reveal layers of nurses' perception of these challenges in Iran. According to the results of this study, to address the challenges of nurses in caring for COVID-19 patients, the shortage of nurses and lack of personal protective equipment should be eliminated and experienced personnel should be recruited. Moreover, nurses need to participate in comprehensive communication skills training courses to learn how to communicate effectively with patients with COVID-19 and their families. Furthermore, it is essential to take the necessary measures to promote the mental health of nurses. Most importantly, there are problems in providing this type of care that lead to cultural distress in nurses. Thus, it is necessary to develop educational programs and present them to the public based on the cultural context of the society.

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Conflict of Interests

The authors declared no conflict of interest.

Ethical Issues

This research project was approved by the Nursing Care Research Center of Iran University of Medical Sciences under the code IR.IUMS.REC.1399.645.

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