Original Article

Frontline Nurses Caring for COVID-19 Patients: Experiences from the Perspective of Turkish Nurses

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Abstract

Background: Nurses were affected by this pandemic more than any other healthcare professionals because they were working on the frontline continuously. **Aims:** The current study explored how nurses who care for patients with COVID-19 assess this process which they experienced, how they coped with the process, and their psychological experiences. The study was conducted by reaching out to the nurses working at pandemic clinics using the snowball sampling method. A total of 40 nurses were interviewed using telephone. The study employed a descriptive qualitative approach. The data were obtained through telephonic interviews that were performed by the researcher using interview forms. **Materials and Methods:** The interview notes were analyzed using the content analysis method according to Colaizzi's phenomenological method. **Results:** As a result of the content analysis, four themes emerged with the following headings: Initial reactions, factors that made an adaptation to the period of pandemic challenging, factors that facilitated the adaptation, and what the period of pandemic taught. **Conclusions:** It is suggested for nurses that their rotation should be planned effectively, and their social support should be enhanced. They should be provided with adequate personal protective equipment and human resource planning should be improved until the end of the COVID-19 pandemic.

Keywords: *COVID-19, experience, nursing*

Introduction

Unlike other epidemics, COVID-19 seriously impacts the public health systems of countries due to its higher contagiousness and increased mortality rates.[1,2] Nurses are healthcare professionals working more than any other healthcare providers during COVID-19. It causes nurses to experience high stress.[3] Given that the pandemic continues, the answer to the question of "What is happening in pandemic clinics?" is a matter of curiosity, beyond the measurement methods determined by survey studies. Answering the questions of "What are they going through?", "How do they cope?", and to avoid the adverse effects of this process in the future, this study determines how nurses who care for patients with COVID-19 evaluate this process, what they have experienced, how they have coped with this process, and their psychological experiences.

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Materials and Methods

Ethics

To perform the study, approval of the non-interventional Clinical Research Ethics Committee of a state university (no.: 2020/5-7) and verbal informed consent of all participants were obtained.

Study design

A phenomenologic qualitative research design was selected. The interview notes were analyzed using the content analysis method according to Colaizzi's phenomenological method.

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Selection and description of participants

This study was conducted on the nurses who provided healthcare services to the patients diagnosed with COVID-19 between October and November 2020. The snowball sampling method was used to determine the participants who would be included in the study. To realize, nurses providing care to patients diagnosed with COVID-19 were contacted through personal acquaintances, and the contact information of volunteers was obtained.

Interview outline

Interview queries were generated by reviewing the literature on the subject. Opinions of 3 experts were obtained regarding the appropriateness of these queries, and the comprehensibility of the form was tested by having pre-interviews with 3 nurses. The form consists of 5 queries: (1) "What were your first reactions when you started providing healthcare service to the patients diagnosed with COVID-19? What did you experience?". (2) "When did your initial reactions begin to abate? What do you think contributed to the decline in your reactions?". (3) "Did you need psychological help throughout this process?". (4) "What has been good for you in this process?". (5) "What did this process teach you?".

Data collection

The data were obtained through telephonic interviews that were performed by the researcher using the interview form. Telephonic interviews were conducted by one researcher.

Data analysis

The interview notes were analyzed using the content analysis method according to Colaizzi's phenomenological method. We used standards for reporting qualitative research to develop standardized and transparent reporting for nonrandomized intervention.[4]

Results

The nurses who were included in the study consisted of 35 females and 5 males, aged between 26 and 50. The working experience of the nurses varies between 2 and 33 years, 5 of them are single, whereas the remaining are married with at least one child. Three people work as head nurses, and the others work as clinic nurses.

As a result of the content analysis, which was conducted to determine the psychological experiences of the nurses, 4 themes were determined under the headings of initial reactions, factors that made an adaptation to the period of pandemic challenging, factors that facilitated the adaptation, and what the period of pandemic

Table 1: Themes obtained from interviews with nurses and nurse views

Themes	Nurse views
1. Initial reactions to the period of the pandemic	"When I was having a meeting in my service, my head nurse told me that I was assigned to the pandemic clinic. I am a qualified staff, and I questioned myself why I am being sent."
	"The clinic where I worked suddenly became a pandemic clinic. We were in a hurry to organize it. I felt panic and anxiety over being infected."
	"Everything was uncertain at the onset of the pandemic. There were no road maps for patients and treatment plans. I experienced uncertainty and lack of information due to this. I learned many things through experience."
	"When I started working in the pandemic clinic, I felt completely like an alien, as if I had embarked in the space shuttle. It took me weeks to get used to the clinic."
	"Occasionally, I feel fatigue, headache, and tension due to the burden of the workload. I have had times when I could not concentrate and comprehend what I read."
2. Factors that made adaptation to the period of pandemic challenging	"We experienced quarreling with the team of physicians. Apart from the specified tasks, physicians made also demands such as taking blood and culture, and catheter insertion, and some of us objected. We experienced problems mainly due to a lack of communication."
	"I wanted to say good morning to the patient and learn a little bit how it was, but we were told that we should stay in the room as short as possible. I experienced the contradiction of this very much".
	"As a nurse for 24 years, I have been forced to do many tasks in other clinics that are not in the job description of the nurse".
	"I told my children and family that I had the virus, and I isolated myself from them. They were anxious about me. I was worried about who would take care of my children."
	"I learned while working that I was virus-positive. I immediately isolated myself. I slept in a one-person clinic; I felt stigmatized. I warned my friends who came to my room not to stay long in the room and leave immediately. One feels lonely."
	"Except for personal hygiene, we neglected our personal care, and we went between the hospital and the bed."
3. Factors that facilitated adaptation during the period of pandemic	"When I started learning about my new service, my worries subsided".

Contd...

Table 1: Contd...

Themes	Nurse views
	"We healed and discharged many of our patients. This made me feel comfortable."
	"Many of my colleagues have been infected and recovered we are all going to be infected it anyway; there is no escape from this."
	"The feeling of universality made me relaxed; I said to myself that everyone is experiencing the same thing, and it is passing."
	"Within 4–5 weeks, everyone learned to manage the process from each other; we were more experienced and more comfortable".
	"Having trained on the usage of protective equipment, how to use masks and visors made me feel better".
	"Working and gaining experience lessened my fear. When I think about it now, I was too scared. Seeing that the patients healed and experiencing the process eased my anxiety."
	"I started doing things that gave me more pleasure. I watched movies, painted, and walked instead of studying since I cannot concentrate".
	"As information about coronavirus and care guidelines began to become clear, the change in information that was constantly experienced from the onset of the pandemic started to decrease, and as the uncertainty decreased, I relieved."
4. What the period of pandemic taught	"We learned how important unity and solidarity are. We tried to stay strong together."
	"My priorities have changed; I have decided to retire".
	"I have decided to consider the new business plan that I postponed and gave up. I have decided to change my job."
	"My clinical skills and skills of practice have increased".
	"My psychological well being has enhanced. I learned to accept; people get used to everything."
	"My crisis management knowledge and experience have increased".
	"My experience in taking precautions against infection has increased".
	"It was once again proven that the nurse is indispensable for intensive care units and patient care. For the first time, the nurse came to be considered a critical care professional, not someone who took blood pressure and injected it. It was an opportunity for this profession. The nurse touched the public"
	"It was good to meet a new team, to meet new friends".
	"This process reminded everyone that nurses are precious".

taught [Table 1]. The themes and their contents are summarized below.

Theme 1. Initial reactions to the period of the pandemic

Nurses stated that when they started providing care to the patients, their first psychological reactions were fear, anxiety, the inadequacy of information, uncertainty, feeling inadequate, loneliness, insomnia, fear of getting infection, and feeling angry toward people who do not apply/do not comply with the protective measures.

Nurses stated challenges related to working in new pandemic clinics. They experienced the following reactions and situations: over-workload, feeling insecure, having trouble-finding equipment and materials, lack of staff due to infected nurses, excessive fatigue and inability to rest, and inadequacy of information about crisis management.

Theme 2. Factors that made adaptation to the period of pandemic challenging

The statements of nurses regarding the factors that make it difficult to adapt to the period of pandemic and the factors related to them are as follows: starting to work in a new clinic and feeling alienated, feeling of inability in clinical skills, leaving home and staying alone in an isolated place in the guesthouse and the feeling of loneliness that was led by this situation, and the concern of who will take care of their children.

The statements of the nurses regarding the factors that make it difficult to adapt to the period of pandemic and the factors related to the clinic include the rapid transformation of their own clinic into a pandemic clinic, being subjected to frequent rotation, having to work standing up for a long time, prolonging working hours, starting new clinics without any orientation training, having meals in an overcrowded mess hall, and not being able to maintain social distancing with the team, unrest, uncertainty, lack of work guidelines, occasional conflicts with other healthcare personnel, insufficient communication within the team, and the necessity to perform many tasks that are not included in the job description.

Theme 3. Factors that facilitated adaptation during a pandemic

The factors, which nurses stated that reduced their initial reactions to the pandemic process and facilitated their adaptation, include starting to learn about their new clinics, things starting to become a routine, the presence of friends who are recovering and returning to work, sending their children to their parents outside of the city for those who have children, being offered with the opportunity to meet with a hospital psychologist, sharing

their feelings with their friends and manager nurses in the same unit, and receiving training on the usage of the equipment.

The nurses stated their experiences of how they overcame this hardship, having cooperation within the team, having the opportunity to deal with things outside of work whenever they had time, taking a walk, keeping a diary, having the opportunity to convey their feelings, and the presence of written motivating messages from the society.

Theme 4. What the period of the pandemic taught

The responses to the query of what the period of pandemic taught the nurses are summarized as follows: the cruciality of unity and solidarity as a healthcare team, sacrifice, gaining clinical skills, increasing crisis management knowledge, realizing life priorities, seeing nursing as professionals, and taking part in a critical duty.

Discussion

In this study, four themes were determined under the headings of the first reactions to the pandemic, factors that make the adaptation challenging, factors that facilitate adaptation, and what the period of pandemic taught, through the content analysis of the results. The results are discussed under these 4 thematic headings.

Initial reactions that were exhibited while working in pandemic clinics

It is seen in the interviews with the nurses that the reactions exhibited with the emergence of the pandemic first are similar to the first reactions in a crisis. It is well known that old coping approaches are inadequate in a novel and unfamiliar crisis.[5] The nurses stated that they had difficulties in coping with the hardships brought by the process and that they experienced challenges such as fear, anxiety, tension, the feeling of inadequacy, loneliness, and insomnia. Nurses, one of the groups at the highest risk of being infected with the virus in the pandemic, work at the forefront while providing healthcare services, at the expense of their lives. Thus, they had to cope with psychological problems for a long time while being exposed to epidemic stress.[6] It was revealed in the studies, which were conducted on the severe acute respiratory syndrome epidemic that occurred in 2003, that it caused symptoms such as high levels of anxiety, stress, depression, and post-traumatic stress disorder in healthcare workers.[7,8]

It has been revealed in some studies that healthcare professionals and in particular nurses experience an increase in mental distress due to the fear of getting infected and infecting their beloved ones in similar epidemics, insufficient personal protective equipment (PPE) and medicines, working in an environment with high virus load for a long time, heavy workload, decreased social support, anxiety, and depression symptoms.[9-12] It was stated in previous studies that healthcare workers working during a pandemic are more prone to having psychiatric disorders.[9,13-20]

Upon reviewing the studies on the responses of nurses during past outbreaks and the results of the COVID-19 pandemic in different countries, it has been determined that their results agreed with the findings of our study. As can be noticed, wherever in the world, human responses to situational crises such as epidemics are universal.[5] In fact, these reactions are not psychiatric disorder; yet, they are normal reactions to an abnormal situation that can be regarded as an effort to protect themselves. These responses are known to diminish over time and return to normal. It was found in our study that these reactions of nurses decreased during the 3rd and 4th weeks when they worked in pandemic clinics.

Factors that make adaptation difficult when working in pandemic clinics

Nurses stated in our study that they can not rest due to their busy work tempo; they were extremely tired and could sleep little. Working duration and the high number of patients cared for are considered factors that directly increase the level of stress experienced by healthcare workers. As the working duration and frequency of interaction with patients increase in clinics, the feeling of discomfort caused by protective equipment increases, and fatigue and tiredness are experienced. This process increases the burnout risk of healthcare workers.[21] Similar results were obtained in studies that were conducted in other outbreaks.[22-24] Fatigue and sleep problems are one of the factors that adversely impact daily work performance and health status and make the process difficult. It was found in a study that the sleep quality of healthcare workers who provide care for patients diagnosed with COVID-19 decreased, and the reason for this was the workload, working in a high-stress environment, the inability of some patients to be treated, and the high mortality rates.[25] Good sleep quality for healthcare professionals not only assists them in working better to treat patients but also maintains optimal immune function to prevent infection.[26] It is crucial to arrange working hours and to have enough personnel to eliminate the sleep problems of nurses working in pandemic clinics.

Adaptation problems to new clinics were mentioned as another factor in our study that make it harder to adapt to the work and process in pandemic clinics. Nurses

who were assigned to work in pandemic clinics without any orientation program due to time pressure and lack of staff expressed themselves as worried and stressed about work. They stated that the lack of information about the process of the pandemic and the uncertainty of the process, particularly in the early days of the pandemic, were their concerns. According to a study conducted on 1,830 healthcare workers in China, 50.4% of the participants manifested symptoms of depression, whereas 44.6% exhibited symptoms of anxiety, 34% insomnia, and 71.5% symptoms of increased stress.[9] Likewise, in a study conducted in two hospitals providing healthcare for patients with COVID-19 in Singapore, 14.5% of 470 healthcare professionals had symptoms of anxiety, and 6.6% had symptoms of depression.[13]

In our study, another factor that makes orientation difficult in pandemic clinics was stated as isolation. Nurses isolated themselves due to their busy work pace, fear of infecting their relatives or being infected, and stayed in guesthouses or hotels allocated by their own institutions or by different institutions. Healthcare workers were considered a high-risk group in terms of infection during a pandemic. It was also revealed in previous studies that healthcare workers preferred to stay away from their homes and family members for long periods due to the concern of infection; they continued to contact their mother, father, spouse, and children solely via phone calls, and the social support that the healthcare workers received from them decreased.[25,27,28] It is well known that adequate social support has a positive impact on psychological and physical health and lessens stress and anxiety.[29,30] Social support and interactions diminish negative emotions such as anxiety and contribute to enhancing mood by reducing stress levels.[31,32] Increasing the social support resources of nurses is of critical importance in this process in which the pandemic continues.

In our study, the last factor that made adaptation difficult was expressed as a lack of information. Nurses expressed the uncertainty of the process due to their work in COVID-19 clinics, the challenges experienced regarding diagnosis and treatment options, and lack of knowledge in clinical and equipment use. Moreover, they stated that they started to work in different clinics without receiving orientation training or being informed about the clinic, which led to anxiety and stress. Similar results were found in previous studies.[22,33] Orientation training to be given to reduce the uncertainty of the process and facilitate adaptation should be considered. Managers should orient nurses through continuous in-service training in rotation planning.

Factors that facilitate the process in the pandemic

In our study, nurses stated that among the factors that facilitated the process that the increased knowledge of the virus, treatment options, and the process over time, the presence of supportive communication among themselves and the decrease in equipment and material shortages are important. Similarly, healthcare professionals working in the MERS-CoV epidemic stated that the creation of protocols for epidemic management, to not encounter any difficulty in accessing PPE, and increased interaction among employees were among the effective factors for them in coping with stress.[34] The increase in knowledge and experience has reduced uncertainty and increased orientation for working in pandemic clinics.

In our study, nurses stated the activities they conducted to distract themselves rather than concentrate on the pandemic as another factor that facilitated the process. They stated that different activities such as walking, watching movies, and painting were good for them. It was reported in a workshop which was held for healthcare professionals fighting the pandemic that awareness sessions for activities, including relaxation, focusing, and breathing exercises, bolstered the participants.[35] To facilitate the adaptation of nurses, there is a need to plan mental health-protective and stress-reducing activities.

In our study, nurses mentioned the positive effects of communication based on solidarity among the factors that facilitate the process. They stated that the guiding behaviors of the service manager nurses or more senior colleagues facilitated the adaptation in newcomers. It was revealed in a similar study that communication and social support among the healthcare professionals who provide care for patients with COVID-19 are effective in coping with stress and reducing their fears.[25] Enriching the social support resources of nurses appears as a factor that bolsters their coping with the pandemic period.

In our study, another factor that facilitates adaptation was expressed as the thought of "being useful." The nurses stated that it was excellent for them to heal the patients and to see them recover and be discharged and that their working motivation increased. It has been reported in a study that the presence of those who have recovered despite the lives lost in the fight against COVID-19 and the presence of patients struggling for recovery is a protective and motivational factor for healthcare workers.[6] Also, support groups are a great way to distress and are recommended.

What the period of pandemic taught

"What the working in the pandemic clinics taught during the pandemic" is determined as the last theme. Nurses stated that they consider the following issues as the acquisitions of the pandemic process: realizing the preciousness of their beloved ones, being patient and responsive, professional solidarity, increased interest in infection control and scientific studies on this subject, and determining life priorities. The pandemic taught them why infection control is important.[36] The challenges encountered in the struggle for life can change the person not only negatively but also positively. As can be seen, working throughout the pandemic has provided an opportunity for personal development. Individuals can reach a better functionality than before the traumatic experience in this experience, which is called growth from trauma.[37] Likewise, nurses in our study reconsidered their priorities in life. Some have decided to retire, whereas others have decided to change their jobs. Although the experiences are positive from the perspective of a person, there is a loss of workforce in healthcare services, and it is a factor that makes the process even more challenging. As a matter of fact, the Ministry of Health had to take measures due to the escalation in resignation and retirement petitions throughout the pandemic in our country. The Turkey Health Ministry banned healthcare staff from resigning and retiring two times.[38]

Conclusion

This study is noteworthy in terms of revealing the experiences of the nurses who provide health care for patients diagnosed with COVID-19. The emotional reactions of nurses with the onset of the pandemic, how they coped with them, the factors that made this process challenging and facilitated it, and what the pandemic taught them were tried to be determined in the study. Given that the experiences of nurses and the prominent needs have been revealed in similar studies, it would be useful to consider these needs in interventions to protect their mental well-being.

Based on the results of this study, the needs of nurses include planning their rotations well enough, abating their burnout, enhancing their social support, improving their working conditions, supplying adequate PPE, improving human resource planning, and expanding child care services for their families and children. Furthermore, to prevent the quitting of healthcare staff, administrators should consider this experienced process from the perspectives of nurses. In conclusion, it is recommended that screening and mental triage should be performed in coordination with psychosocial support teams at regular intervals for nurses working throughout the pandemic. It is also important to take preventative measures for maintaining their mental health that may include stress-relieving activities, the provision of rest space, and the provision of online hope-oriented activities that can be recommended in future psychological rehabilitation studies.

Limitation

Solely nurses were included in the study. It is considered that in addition to the nurses, the inclusion of other healthcare professionals can enrich the study. Because the risk of contamination was high due to the pandemic, only telephone interviews could be conducted for data collection. Focus group interviews can also be performed in such studies.

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Conflicts of interest

There are no conflicts of interest.

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