

Original Article

Life Experiences of Nurses Diagnosed with COVID-19: A Qualitative Study

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Abstract

Background: COVID-19 is a disease that causes many people to get sick and die. Nurses were diagnosed with COVID-19 disease, and some nurses also died from this disease. The aim of this study is to examine the life experiences of nurses diagnosed with COVID-19.

Methods: This research was conducted with the qualitative research method. The data were collected using a semi-structured interview form using the in-depth interview technique. The study was conducted with 22 people until the data repeat occurred. Seven categories were determined as a result of the analysis of this research.

Results: These categories are as follows: Changes in your life after being infected with the disease, changes in working life, perspective on the disease, strategy to cope with the epidemic, contamination status, attitude of the environment and post-illness symptoms.

Conclusion: It has been found that nurses take more preventive measures after the illness, take the disease more seriously, follow the mask rule, distance rule and hygiene rules more, and are exposed to stigma by the society due to their profession.

Keywords: COVID-19, nurse, life experience

Introduction

The ongoing COVID-19 disease has seriously affected healthcare workers globally. According to the data of the International Nurses Association, it has been reported that at least 230,000 healthcare workers in the world have been diagnosed with COVID-19 and more than 600 nurses have died worldwide (International Council of Nurses, 2020). Health professionals who are actively involved in the diagnosis and care of patients in the difficult conditions of the

COVID-19 epidemic are likely to encounter psychological difficulties and other health problems. The increase in the number of cases complicates the workload, the inadequacy of personal protective equipment, the lack of appropriate drugs increase the psychological problem lives of health workers (Arab-Zozani & Ghoddoosi-Nejad, 2020; Kakemam et al., 2020; Lai et al., 2020). Nurses, the largest group of healthcare professionals, are at the forefront of the healthcare system during outbreaks (World Health Organization, 2020). Since nurses provide close

physical care to patients, they have a high risk of direct exposure to the virus and illness (Hope et al., 2011; Seale et al., 2009). During the initial phase of the pandemic, some nurses were infected while working with COVID-19 patients. Nurses continue to serve in the diagnosis, treatment and care of patients with limited resources, as important health professionals serving in the COVID-19 pandemic (Newby et al., 2020). In the literature, it is stated that nurses who are faced with this critical situation and who are at risk of infection are exposed to a significant level of stress and psychosocial problems occur along with this intense stress (Bai et al., 2004; Lee et al., 2007; Maunder et al., 2006).

Nurses have also ensured that infection control methods are implemented and maintained to control the spread of COVID-19 (Catton, 2020; Sohrabi et al., 2020). But the high risk of the disease, the lack of specific drugs and treatment, has made it difficult to treat and care for patients (Guo et al., 2020). In addition, a lack of medical facilities and staff, confusion in the treatment system, the unpredictable nature of the disease, social isolation, and the rapid spread of the virus have made Nursing Services difficult. Nurses have been exposed to serious risks or even death while caring for COVID-19 patients. In pandemics, it was found that the majority of nurses who had professional responsibility for caring for the community were concerned about their work. Studies with nurses during outbreaks before the COVID-19 pandemic reported concerns about the risk of infection, transmission of family members, stigmatization, and restrictions on their personal freedom (Hope et al., 2011; Koh et al., 2012; Seale et al., 2009).

Disorders in physical and mental health significantly affect nurses' service performance. Co-workers, difficult working conditions, sensitive working conditions, and factors related to the physical environment cause the prevalence of psychological problems such as stress, depression and anxiety in healthcare professionals to be high (Bakhshi et al., 2018; Rafii et al., 2016; Saedpanah et al., 2016). As can be seen in the above studies, there are studies evaluating the coronavirus epidemic experiences of nurses in the past years. However, there is limited research on the life experiences of nurses diagnosed with COVID-19 (Chegini et al., 2021; He et al., 2021). The aim of this study is to evaluate nurses' COVID-19 experiences and family and friend relationships during the disease process.

Methods

Research Pattern: Qualitative research method was used in this study. This study was conducted with in-depth interview.

Working group: The purposeful sampling technique is preferred more because it is aimed to examine the persons or situations participating in the study in depth rather than generalizing the results of qualitative research to the universe (Creswell, 2013). In this study, the purposeful sampling technique was preferred in accordance with the nature of the qualitative study. The working group consisted of people who worked in a public tertiary pandemic hospital in the Central Anatolia Region in November 2020, received the diagnosis and treatment of COVID-19 and returned to work, and the study was conducted until data repetition was formed (N=22 people).

Data Collection Tools: In this study, semi-structured interview was used as a data collection tool. Literature review was conducted to develop the semi-structured interview form. (Kalateh Sadati et al., 2020; Pasay-an, 2020; Zohreh et al., 2020). A structured interview form consisting of unique 7 items was prepared based on these researches. While preparing the form in the study, care was taken to ensure that the questions were easy to understand and simple. In order to ensure that the interview forms are understandable and valid in terms of competence, the shortcomings of the interview form were eliminated according to the feedback obtained by asking a public health nursing specialist and an assessment and evaluation specialist. In addition to the questions of the interview form, expressions such as "why, how, exactly what did you mean, explain" were included in order to clearly understand the opinions of the participants. A person conducting the research interviewed with the participants; it was stated that the identity information would be kept confidential by showing the interview form. The interviews were recorded on a tape recorder with the permission of the participants. In addition, an environment where the participant would respond comfortably was preferred during the interviews, and the interviews lasted 25-30 minutes. The interviews were made into text and the codes and categories were determined.

The interview was started after the purpose and importance of the study was explained to the researcher. Interviewers are nurses with at least 10 years of clinical experience in Public Health Nursing. The research data were deciphered by three researchers. The interview questions of the

study are as follows: What changes happened in your life after you had COVID-19 disease? Can you explain? What changes have happened in your work life after suffering from COVID-19? Can you explain? Do you think you have infected the COVID-19 disease in your environment? Can you explain? What was the attitude of your environment towards you after you were diagnosed with COVID-19 disease? Have physiological symptoms persisted after being infected with COVID-19 disease? Can you explain? What changes have you seen in your perspective on the disease after your recovery from COVID-19? Can you explain? After your recovery from COVID-19, what has changed in your strategies to cope with the pandemic? Can you explain?

Data analysis: Data collection and analysis were carried out simultaneously in the study. Data were analyzed using the content analysis approach of Graneheim and Lundman (Graneheim & Lundman, 2004). First, the interviews were transcribed. After listening to the interviews, the transcripts were read several times to get a general sense of their content. An analysis unit consists of a conversation of transcripts whose semantic units include words, sentences, and paragraphs. Semantic units are groups of words or sentences that give the same meaning or are related in some ways to the same concept. According to this situation, the semantic units were condensed and coded. The codes are compared with each other and divided into more abstract categories according to their similarities. Finally, the categories were compared with each other and divided into higher categories (Graneheim & Lundman, 2004).

Validity and Reliability: Some studies have been done to control the factors that will affect the validity and reliability of the study. The opinions of the experts were taken into consideration in the preparation of the interview form in order to ensure the internal validity of the study. In line with the expert opinions, it was examined by taking into account the clarity and appropriateness of the questions and the necessary corrections were made. In order to ensure the external validity of the study, the reason for choosing the method used, the study group, the application process of the study, the data collection tool and the analysis process were explained in detail. The internal reliability of the study was increased by directly placing the participants' opinions on the findings and using the recording device. The researchers quoted the participants' views without any

changes. In this way, doing bracketing before starting data collection is provided in the research. Finally, the consistency of the results and findings section was discussed by the researchers and a consensus was reached. In this way, the external reliability of the research was tried to be increased.

Ethics approval: Ethics committee approval was obtained from Erciyes University Social and Human Sciences Ethics Committee (No: 172) and written permission was obtained from the hospital where the study was conducted.

Results

In this section, categories were created according to the answers obtained from the questions asked to the nurses. The demographic data of the nurses are given in Table 1 in detail. Table 2 contains findings regarding the experiences of nurses diagnosed with COVID-19. The category "changes in your life after suffering from COVID-19 disease" has been created regarding the question of "What has changed in your life after suffering COVID-19?" Table 2 contains findings regarding the questions asked to nurses.

Changes in the lives of nurses diagnosed with COVID-19 after suffering the disease: In this category, which was created to determine the changes in the lives of nurses diagnosed with COVID-19 after they had the disease, half of the participants expressed anxiety. For example P-13 stated that

"When I got sick, the information about the disease was not clear. I didn't know what awaited me. So I felt anxiety and didn't know what the effect would be 10 years from now."

In addition, some of the interviewees stated that they experienced fear of death after suffering COVID-19. In this context, P-8 stated that

"As a healthcare provider, I was afraid of being intubated. We see patients intubated in intensive care units. I thought they couldn't hear me when I was intubated"

In this statement, P-8 stated that the patients he cared for experienced fear of death due to the situation.

Changes in the working lives of nurses diagnosed with COVID-19 after suffering the disease: A category of "changes in working life after suffering COVID-19" was created regarding the question of "What changes have happened in your working life after you suffered from COVID-19?" Under this category, codes of "fatigue, unwillingness, fear of getting sick, trying to avoid illness" were created.

Table 1: Nurse demographic characteristic

	Mean	SD
Age	32.36	6.78
Years of work in the profession	10.09	6.10
Sex		
Female	16	72.7
Male	6	27.3
Educational status		
Associate degree	1	4.5
Bachelor and above	21	95.5
Marital status		
Married	16	72.7
Single	6	27.3
Number of children		
0	8	36.4
1	1	4.5
2	12	54.5
3	1	4.5
Who do you live with?		
With family	18	81.8
Alone	4	18.2

Table 2: The experiences of nurses diagnosed with COVID-19

Category	Code	N
Changes in your life after having COVID 19	Feeling anxious	13
	Fear of death	7
Changes in working life *	Tiredness	5
	Unwillingness	8
	Fear of infection	3
	To give importance to prevention from disease	9
Perspective on the disease	I started to take the disease more seriously	16
	Fear	4
Strategy for dealing with the epidemic *	Paying attention to social distance	5

	Use of masks	7
	Follow the hygiene rules	7
	Healthy diet	1
Contamination status *	I think I've contaminated the disease	6
	I didn't contaminate the disease	16
Environmental Attitudes	Stigmatization by society	1
	Worry (Anxiety)	6
	Help	2
	Pain	8
	Tiredness (fatigue)	11
Post-illness Symptoms *	Loss of taste and smell	4
	Lack of appetite / nausea	3
	Shortness of breath	1
	Cough	1

* More than one answer has been given to these questions.

In this category, which was created to determine the changes in the working life of nurses diagnosed with COVID-19 after the illness, some of the participants stated that they experienced fatigue. P-13 stated that

"I feel very tired and exhausted. I thought I was not physically strong enough to work. After that, I didn't want to come to work. I didn't know what would happen to me because of this uncertainty"

In addition, they stated that the participants were not willing to study due to the poor clinical course of their patients. P-14 stated that

"...As I said, you do not have professional satisfaction and you are constantly dealing with the same things. Put on personal protective equipment, intervene the patient. We have a feeling that after all that effort, we are whistling in the wind. As I said professionally, there is no satisfaction right now. The patient profile impressed us"

According to the findings obtained from the interview, some of the nurses stated that they attach importance to protection from the disease while working due to the re-transmission of the disease. P-9 stated that

"Since I was infected by my colleagues, I tried to pay more attention in the nursing room. I started not to take off my mask at all. We were snatching from each other actually I saw it"

Some participants in the study (P-4, P-13 and P-22) stated that they had a fear of contracting the disease.

Perspective on disease after COVID-19 infection

The category of "perspective on disease after COVID-19" was created regarding the question of *"After suffering COVID-19, what changes have you seen in your perspective on the disease?"*

Under this category, "seriousness and fear" codes were created.

The majority of the participants stated that they took the disease more seriously because the symptoms of the disease were severe after they had Covid-19 infection. In this context, P-16 stated the following:

"As I said, I was not caring about the disease and taking it lightly. Since I was young and my body resistance was good, I thought that not much would happen. But as I said, when my lungs were in very bad condition, I thought that society should pay more attention to the disease. "

In this statement, P-16 argued that the disease should be considered more. Some participants in the study (P-8, P-9, P-10 and P-14) stated that they experienced fear after suffering the disease.

Strategy to cope with the COVID-19 pandemic

A category of "strategy to cope with the COVID-19 pandemic" has been created regarding the question of

"What changes have happened in your coping strategies after you suffered from COVID-19?" Under this category, codes of "paying attention to social distance, using masks, following hygiene rules, and healthy diet" were created.

Although different in dealing with the epidemic, the participants stated that they identified various

strategies. It is seen that the participants pay more attention to the protection measures, especially the mask and distance rules, after they have suffered from the disease. P-17 stated his opinion on this issue as follows:

"I understood that the distance is absolutely important... I understood that the distance and the mask definitely protect."

In addition, the participants stated that the hygiene rules should also be followed. P-20 expressed his opinion on this issue as follows:

"I used to go into the patient's room without wearing gloves, but now I wash my hands before wearing gloves and even after removing them. I advise my friends to take out all their equipment after leaving the sick room and go like that."

From this point of view, it is seen that the participants attach more importance to protection measures in order to be protected from the epidemic. One participant in the study (P-6) stated that a healthy diet would cope with the epidemic.

Contamination status

The category of "contaminating the disease" was created regarding the question of

"Do you think you are infecting your environment with COVID-19 disease?"

Under this category, the codes "I contaminated, I did not contaminate" were created. Most of the participants stated that they did not contaminate the disease. P-21 explained his opinion on this issue as follows:

"I don't think I infected anyone around me".

On the other hand, some participants stated that they transmitted the disease to people around them. P-11 stated that

"...I got someone infected. I also infected my mother, it affected me very much, I was very sorry. She was always at home".

The fact that the majority of the participants do not infect the disease reveals that the perception that COVID-19 is transmitted from healthcare workers is wrong.

Environmental attitudes

The category of "environmental attitude" was created regarding the question of

"What was the attitude of your environment towards you after you were diagnosed with COVID-19 disease?"

Under this category, codes of "being stigmatized by the society, anxiety, helping" were created.

Participants stated that they were stigmatized due to the prejudice of the society towards healthcare professionals. P-1 stated that

"When we go out of the apartment after the insulation is over, people do not take the same elevator, nobody wants to approach. They avoid as if we are plague. But we worked here to protect the public and I got the disease from the hospital. Maybe I wouldn't think that way if I were infected outside the hospital. I would blame myself".

Due to the rapid increase of COVID-19 and the increase in deaths, the concerns of the participants' close circles increased. In this context, P-19 stated that

"They were especially worried about us as there were many deaths from the disease. They were very scared because nobody was with us. They are in a constant rush since they were thinking about how we were or if we were feeling well. So they were nervous"

Two participants in the study (P-7 and P-17) stated that their immediate environment helped them.

Symptoms after the COVID-19 outbreak

Disease symptoms continued in the majority of the participants after the illness. Half of the participants emphasized that they felt fatigue after the illness. P-11 stated that

"The sense of taste and smell came back a little late, already my fever did not last much, weakness and weakness still continues".

Some participants stated that their pain was frequent. P-12 stated that

"...My headache hasn't gone away. I was not a person complaining of headache until the age of 30, but after Covid-19, my headache does not go away. So I often suffer from headache."

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Discussion

Being diagnosed with COVID-19, having severe symptoms of the disease, and high mortality affect the mental and physical health of people negatively (An et al., 2020; Chen et al., 2020; Karimi et al., 2020). In various studies in the literature, the experiences of nurses caring for COVID-19 patients have been examined (Cui et al., 2020; Galehdar et al., 2020; Kackin et al., 2020). However, there are a limited number of studies examining nurses diagnosed with COVID-

19. (He et al., 2021). In this study, the experiences of nurses after being diagnosed with COVID-19 were examined.

In this study, nurses experienced anxiety and fear of death after being diagnosed with COVID-19. In a study, individuals diagnosed with COVID-19 stated that they experienced fear of death even though they did not show symptoms of COVID-19 (Aungsuroch et al., 2020). In two different studies conducted with nurses during the pandemic period, it was determined that their nurses were anxious (Kackin et al., 2020; Karimi et al., 2020). From this point of view, it is seen that individuals associate COVID-19 disease with death.

The fact that nurses care for infected patients increases the likelihood of being infected by the disease. In addition, the disease of nurses causes some changes in their working life. In this study, the changes in the working life of nurses are as follows: fear of getting sick, being unwilling, being tired and paying attention to protection from illness. The fact that the nurses are infected with the disease has led them to take more precautions. In addition, the nurses gave the opportunity to experience the experiences of the patients due to the illness. This situation may affect nurses' self-care positively (Barello & Graffigna, 2020; Ghaedi et al., 2020).

It can be said that the absence of epidemic experiences of the nurses participating in the study increases the seriousness and fear in nurses. In this study, the fact that nurses were also infected with the disease caused them to take the disease more seriously and to experience fear. Nurses' experiences with the epidemic gain importance when infectious diseases are seen (Oh et al., 2017).

People have developed various methods to deal with traumatic events such as diseases and natural disasters (Huang et al., 2020). In this study, nurses tried to cope with the epidemic by paying attention to social distance, using masks, following hygiene rules and eating healthy foods. The prevention strategies developed by healthcare professionals are in line with WHO's strategies (World Health Organization, 2020). This situation shows that the nurses act in accordance with the rules regarding the epidemic.

During the pandemic, healthcare workers are at risk of infecting their families and immediate environment as well as protecting themselves from the disease, which is a big problem for

healthcare professionals. Most of the nurses participating in the study stated that they did not infect their families and immediate environment. In a study by Adams and Walls, they stated that the working conditions of healthcare workers are difficult and they are worried about infecting their families (Adams & Walls, 2020). Contrary to the view that the spread of the disease in the society is caused by healthcare workers, this situation reveals that healthcare professionals pay more attention to prevention methods than other individuals.

Family and community support is important as well as the medical treatment required when nurses are infected with the disease (Yin & Zeng, 2020). In this study, some nurses diagnosed with COVID-19 received support from their families and close circles after being diagnosed. This situation prevented nurses' feelings of loneliness during the quarantine process from deepening (Fernandez et al., 2020; Lu et al., 2020). Similar to the results of this study, a study found that nurses received support from their families during the epidemic period (Sun et al., 2020). In this study, one of the nurses reported being stigmatized for being diagnosed with COVID-19. A study by Chen and colleagues argued that individuals who remain in quarantine due to contact can be considered a source of the virus in society regardless of diagnosis of the disease (Chen et al., 2020). Similar to this study, different studies have found that nurses are stigmatized during outbreaks (Kackin et al., 2020; Kim, 2018). It can be stated that this situation causes stigmatization in the individual.

In this study; Feeling anxious code in Changes in your life after having COVID 19 category, To give importance to prevention from disease and I started to take the disease more seriously codes in Changes in working life category, Use of masks code in Perspective on the disease category, Strategy for dealing with Follow the hygiene rules code in the epidemic category, I didn't contaminate the disease code in the Contamination status category, Pain and Tiredness (fatigue) codes in the Environmental Attitudes category, and Loss of taste and smell code in the Post-illness Symptoms category.

Limitations of the study: The study has some limitations. Conducting the study only on nurses working in a hospital was not addressed with nurses with different working conditions, and the

nurses included in the study were interviewed only once.

Conclusions: According to the study, nurses' being diagnosed with COVID-19 caused anxiety and fear of death. Nurses who started to work after the illness experienced fatigue, unwillingness, fear of getting sick, anxiety, and efforts to protect themselves and fear of getting sick. Before being diagnosed with COVID-19, it is recommended that nurses take the necessary precautions to protect their families and inner circles from the disease.

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