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# EXPERIENCES OF A NURSE DIAGNOSED WITH COVID-19: A CASE REPORT

Melike YAVAŞ ÇELİK<sup>1</sup> Fatma KARASU<sup>1\*</sup>

<sup>1</sup> Kilis 7 Aralık University, Yusuf Şerefoğlu Faculty of Health Sciences, Kilis, Turkey

#### **Abstract**

It was aimed to reveal the experiences of a nurse who worked devotedly during the pandemic process after being diagnosed with covid-19. In the study, there are data collected by interviewing a nurse with Covid-19 while serving covid-19 patients. The nurse was diagnosed with known symptoms such as severe cough, high fever, and shortness of breath, as well as emptoms such as loss of sense of smell. In addition to physiological difficulties, our case also faced psychological problems such as lack of social support, loneliness, sadness and anxiety due to his isolated environment and his desire to protect his family. In the case report, valuable findings about covid-19 and the difficulties experienced by the nurse when diagnosed with covid-19 were presented.

Keywords; Covid-19, Outbreak, Nurse.

# COVID-19 TANISI KONULAN BİR HEMŞİRENİN YAŞADIKLARI: OLGU **SUNUMU**

Öz

Pandemi sürecinde özverili çalışan bir hemşirenin covid-19 tanısı konduktan sonra yaşadıklarını ortaya koymak amaçlandı. Çalışmada, covid-19 hastalarına hizmet verirken Covid-19 hastası olan bir hemsire ile görüsülerek toplan veriler mevcuttur. Tanı konulan hemşirede, şiddetli öksürük, yüksek ateş, nefes darlığı gibi bilinen semptomlarının yanı sıra koku alma duyusu kaybi gibi semptomlar tespit edildi. Olgumuz, fizyolojik zorlukların yanı sıra izole ortamı ve ailesini koruma arzusu nedeniyle sosyal destek eksikliği, yalnızlık, üzüntü

\*Sorumlu Yazar Fatma KARASU

e-posta: fatma.gecici@hotmail.com ORCID: 0000-0002-7347-0981

Melike YAVAŞ ÇELİK

ORCİD: 0000-0002-1155-1022

ve kaygı gibi psikolojik sorunlarla da karşı karşıya kaldı. Olgu raporunda, covid-19 ile ilgili değerli bulgular ve hemşirenin covid-19 teşhisi konulduğunda yaşadığı zorluklar sunuldu.

Anahtar Kelimeler; Covid-19, Salgın, Hemşire.

#### **BACKGROUND**

The coronavirus (Covid-19) infection that occurred in Wuhan, China in December 2019 has affected the whole World (Ho et al., 2020). The transmission of the disease by droplet caused a rapid spread. Rapid spreading caused the number of infected people to be higher than expected (Ho et al., 2020; WHO, 2020). Shortly afterwards, coronovirus (covid -19) infection was declared as a pandemic epidemic by WHO (WHO, 2020).

Coronovirus (covid-19) belongs to the same group of viruses that cause Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) (Zhonghua et al., 2020; Huang et al., 2020a). The virus causes serious acute respiratory infections and progresses asymptomatic, mild or severe symptomatic (Huang et al., 2020a; Zhu et al., 2020). Nurses have been at the forefront of those who have been struggling with various diseases and outbreaks throughout history. Nursing is a professional profession with a scientific foundation Ethics, philosophy, theory, and nursing models are included in the components of nursing profession science and professionalism (Sert et al., 2014). Nurses review the patients with these equipment, plan the steps of the nursing process and apply the care to help the patient return to normal conditions (Karacaoğlu et al., 2016; NANDA, 2014). In this pandemic process, nurses were always at the forefront and faced with vital risks in order to fulfill their duties. Nurses in close contact with Covid-19 patients were vulnerable to infection and faced the spread of the virus to both their colleagues and family members (Lu et al., 2020; Lin et al., 2007).

In the announcement released by the International Council of Nurses (ICN), it was declared that 230,000 healthcare workers were infected with Covid-19 and more than 600 nurses lost their lives. In addition, ICN says that nurse's deaths don't represent truly and find preventions insufficient and governments don't take the necessary measure in this situation (ICN, 2020). In addition, according to Covid-19 current situation analysis report by Turkish Nurses Association; 55.7 % of the nurses work as 24-hour attacks, 58.6 % work 40-48'a week, 35.3 % provide care to 10 or more patients. In the unit where they work, the rate of nurses providing care for the patient diagnosed with Covid-19 was 82.1 %. In addition, 50.1 % of the nurses stated that the necessary food presentation for adequate and balanced nutrition was not provided in their institution (TNA (Turkish Nurses Association), 2020). While the fight against the virus

continues all over the World nurses and health care professionals, take a set of measure in their own right to be content with insufficient equipment and in terms of prevention wastage. They have given the lead to using materials in innovative and efficient by tying the diaper to their mouth in the form of a mask, doing protector face from plastic transparent material. Although protective apron lead to sweating and meeting personal needs prevent, they unable to take off their protective apron; in order to reduce the loss of personal protective equipment while they are working, they put off eating and drinking water. In some nurses have to use fewer goods their they used constantly or have to cover with protective wears equipment like cell phone. Also, nurses are exposed violent beacuse they don't accept patient's relatives. Nurses and health professional haven't given up struggle against their difficulties to the challenges brought by COVID-19, embrace the challenges actively and try to do their best (Jiang et al., 2020; Karasu & Çopur, 2020)

Unfortunately, most nurses had to experience covid-19 disease. One of these nurses is our colleague in our study. With this study, it was aimed to convey the experiences of a nurse working in the covid service who experienced this disease.

#### CASE REPORT

The study is a case report. The data were collected by interviewing a nurse was patient of Covid-19 while she was serving covid-19 patients. Due to the pandemic, communication was provided with the nurse friend by phone. In the first interview, the nurse was asked whether she wanted to participate in the study or not, and when she agreed to participate, an appointment was made for a suitable day. Later, a video call was made with the nurse on 01.11.2020.

Tables for Covid-19 Suffering from a Nurse's Mouth

**Table I.** Laboratory Results

Values	Result	Normal range	
WBC	5.66	4.10-11.0	
RBC	4.79	4.0-6.2	
HGB	144	110-180	
HTC	42.7	35-55	
MPV	12.1	6-10	
LYMPH%	17.8	25-50	
ÜRE	28	17-43	
KREATİNİN	0.64	0.51-0.95	
CRP	5.4	0-5	
PT	12.2	9.4-14.2	
INR	1.03	0.8-1.2	
PRC-TEST	POSITIVE	25.04.2020	
PRC-TEST	NEGATIVE	01.05.2020	
PRC-TEST	NEGATIVE	02.05.2020	

Figures for Covid-19 Suffering from a Nurse's Mouth

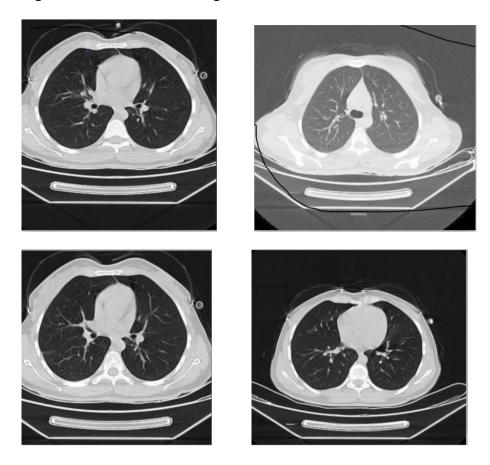


Figure I. Tomography results taken during the diagnosis of the patient.

# **Interview questions**

- 1. Can you introduce yourself to us?
- 2. Could you tell us what happened when you were diagnosed with covid-19?
- 3. How did you know you were covid-19? What symptoms did you experience?
- 4. What medications did you use in your treatment, what was done?
- 5. Could you give information about the functioning of the hospital and clinic you work in?
- 6. How do you feel as a nurse in the face of the COVID-19 outbreak and what have you experienced during this process?

## **DISCUSSION**

# Can you introduce yourself to us

"I work in a training and research hospital in Istanbul. I am 21 years old and I am single. I stay

in a house with a nurse friend working in the same hospital. In this process, Unfortunately, I got this virus even though I was working with full protective equipment and taking all precautions on 25.04.2020 while doing my best for patients with covid-19." Healthcare professionals are the professionals who are at the forefront of the war with Covid-19, who communicate with patients and spend a long time with them. For this reason, healthcare professionals experience troublesome situations such as pathogen exposure, long working hours, psychological distress, fatigue, professional burnout, stigma and physical and psychological violence (WHO, 2020; Mason & Friese, 2020). The WHO published on March 19 to support healthcare workers stated clearly that healthcare workers do not have occupational health and safety and should be supported in this regard. In addition, the precautions, roles and responsibilities of health professionals to take to prevent the Covid-19 outbreak have been reported in this source (WHO, 2020; Mason & Friese, 2020; Lai et al., 2020). Our case stated that he used all protective equipment in covid-19 service. Unfortunately, despite all precautions, it was stated that covid-19 virus was seen in our nurse friend.

## Could you tell us what happened when you were diagnosed with covid-19?

"When I found out that I was covid-19, I was very scared, the first thing that came to my mind was death, the person feels helpless. My quarantine process took 12 days, and it was very tiring and difficult for me to get my family's support. I couldn't tell them, I had isolated a room on my own, away from everyone else. I even had a hard time meeting my needs, I had no one with me, whereas when I got sick, my mother would always be with me, she would look at me. This time it did not happen, I did not even let them know so that they would not be upset and afraid. Because I know that both my mother and father would come to me during this process, and this time they would get sick. I couldn't do that to them, I couldn't say anything. I told them that I am good, no matter how much I suffer in every phone call. However, I needed their support so much! I missed them so much.... I cannot explain, feel and experience the feeling of loneliness, fear and anxiety I have experienced in this process. Fortunately, this challenging process has passed 1 month and 15 days, but still the sense of smell has not been replaced. Now I patiently wait for my sense of smell to be fulfilled. This situation is a big loss for me. " In a study conducted by McAlonan et al. With 176 health workers using the Depression - Anxiety - Stress Scale-21, it was stated that health workers had higher depression, anxiety and stress scores than the normal population (McAlon et al., 2007). Likewise, in a study conducted by Lai et al. With 1257 healthcare workers in China during the coronavirus epidemic, it was found that healthcare workers had high levels of stress, anxiety, and depression (Lai et al., 2020). In this case, the person stated that he had feelings of loneliness, fear and anxiety. He also stated that he did not have enough social support to protect his family and prevent them from being upset, and that he was even forced to meet his own needs. In the study conducted by Kwek et al. To determine the psychological status and quality of life of the patients treated with SARS, after 3 months, the SF-36 Quality of Life Scale score of healthcare workers was lower than other patients (Kwek et al., 2006). Studies also show that depression, anxiety and quality of life are negatively affected during epidemic processes. People experience stress as a natural, normal and necessary response when faced with a dangerous situation. Emotions experienced with stress are especially anger and anger. If the stimuli that cause stress are not coped, the feeling of pessimism emerges as a secondary emotion. The most obvious of the psychological disorders that occur in individuals as a result of stress; anxiety, depression, insomnia and fatigue (Bie'n et al., 2015; Drury & et al., 2019). Similar cases experienced in our case. During outbreaks, fears of illness and death, stigma, and helplessness have been reported(Hall et al., 2008; Rubin & Potts, 2010). In addition, stress disorder, panic attack, anxiety, depression, and psychotic symptoms have been diagnosed in individuals who remain in the quarantine and socially isolate themselves (Xiang et al., 2020; Severance et al., 2011).

# How did you know you were covid-19? What symptoms did you experience?

"It was a very painful and difficult period for me. It was nothing like the illnesses I had before. I was carrying many symptoms; The process that started with high fever and cough gradually became more severe and symptoms such as weakness, joint pain, loss of smell, throat burning, swelling, back and chest pain, nasal congestion, and abdominal pain began to accompany. This process first started with my fever, I came to the hospital because I had a seizure despite my fever. I had lost my sense of smell, I had a fever, and I was short of breath. When these symptoms occurred, I immediately decided to have a test. I had a PCR Test, gave blood, had a lung tomography, and then I continued working. A few hours later, my doctor informed me that my tomography had a ground-glass image and I might have had covid-19 (results are given in figure 1). After this process, I went home. One day later they reported me when my swab was positive in my result (results are given in table 1). Also CRP, LYMPH%, MPV are high. Other laboratory findings are normal (results are given in table 1). I quarantined and isolated myself in a room at home. I had a fever that exceeded 38 degrees 2 times during the illness. My other life findings; my breathing was 22-24 per minute, my pulse was 120-130 per minute, my blood pressure was 110/70 mmHg". The most common symptoms at onset of COVID-19 illness are fever, cough, and fatigue, while other symptoms include sputum production, headache,

haemoptysis, diarrhoea, dyspnoea, and lymphopenia (Ren et al., 2020; Huang et al., 2020b; Wang et al., 2020; Carlos et al., 2020).

# What medications did you use in your treatment, what was done?

"In this process, I used 200 mg plaquenil, which is also used in the treatment of malaria for 5 days, morning and evening. On the 6th day, I had a PCR test again, and my test result was negative, but I had to take two tests to get back to work. Therefore, I had a test on the 7th day and the result of my second test was negative. Although the results were negative, I still had an amazing chest pain, so I didn't start work". It is important to caution readers that new data emerges daily regarding clinical characteristics, treatment options, and outcomes for COVID-19. Optimized supportive care remains the mainstay of therapy, and the clinical efficacy for the subsequent agents is still under investigation. Antimicrobial stewardship programs, including infectious diseases pharmacists and physicians, are at the forefront of COVID-19 emergency preparedness (McCreary EK & Pogue, 2020). There is presently no vaccine or specific antiviral drugregime used to treat critically ill patients (Cunningham et al., 2020).

## Could you give information about the functioning of the hospital and clinic you work in?

"Some hospitals in Istanbul have been determined as pandemic hospitals. our hospital is not included in these hospitals. However, some of the clinics in the hospital where I work were turned into pandemic wards. Young nurses and doctors like us were forced from previous clinics to work here. all healthcare workers are currently on leave and their right to resign has been lifted. As all healthcare professionals, we work heartily. We work by putting our lives in danger. However, we also need permission and rest. When they saw the negativity of my test, they said start work immediately. My test result was negative, but I say I'm not okay, they don't want to report to me. I would not work even if I was a patient expected from me. This is a very difficult situation, you are not worth it, you are only seen as a labor force". Most of nurses' work involves direct contact with patients. As nurses have high vulnerability to COVID-19, it is necessary to establish hospital-specific protocols to reduce the risk of nurses' infection in interactions with COVID-19 patients. Therefore, nurses should be included in flexible working programs. Too many nurse deaths and contamination are reported unless the nurses stay away from adequate rest and pathogen exclusion (Huang et., al, 2020b).

How do you feel as a nurse in the face of the COVID-19 outbreak and what have you experienced during this process?

"I think that we are on the front in a war and that we do not fight traditional weapons in this war, which is a feeling that healthcare professionals feel in general. Also, I don't see the light at the end of the tunnel. I think I am losing all hope that the pandemic will end. The busy shifts are endless and I cannot spare enough time to rest. Many times I feel helpless and very tired. The number of working nurses is insufficient for this period. We do not have any protective equipment shortage now, but we are going through a process that is psychologically worn out. Unfortunately, it is not possible to maintain physical distance with the patient during the treatment and care process. When I was dealing with the epidemic, it was upsetting to hear from my colleagues who were positive for COVID-19 (+) and I was very afraid that the virus would infect me. Although I paid so much attention, it happened to me that I was afraid. During this period, there were many times when I feared death ". Nurses are at the forefront of the coronavirus-fighting process effectively, and as the healthcare professional group that is in the closest contact with patients, they take part in meeting the instant changing needs of the patient. They closely contact the patient at stages such as blood collection, drug delivery, ventilatory procedures, positioning the patient, and measuring the findings (Huang et al., 2020b; Huang & Zhao, 2020). However, although nurses have a professional obligation to provide care to the society during the pandemic process, nurses live difficulty reseaon for the continuous increase in the number of cases due to COVID-19 while performing their profession, difficult working conditions, insufficiency of personal protective equipment, lack of disease-specific medicines, insufficient support, families to protect their relatives. Also, they are struggling with great problems due to the inability to meet with or not being able to be sent home due to the lack of personnel in the institutions they work in, long working hours and insecurity of their working environment (Kackin, Ciydem, Aci & Kutlu, 2020; Ulrich, Rushton & Grady, 2020; Bambi, Iozzo & Lucchini, 2020). Healthcare professionals are more concerned than the general public about transmission of viruses during the pandemic and they are risk group (Wu et al., 2009; Kackin, Ciydem, Aci & Kutlu, 2020). According to a study conducted during the COVID-19 outbreak in China, healthcare workers were found to experience high levels of anxiety compared to the majority of the population (Huang & Zhao, 2020).

# PRACTICE IMPLICATIONS

As a result, nurses show a great sacrifice in this epidemic process, putting their health at risk as well as a fairly busy working pace. This case report also supported this situation. In addition, this case became ill even though he used all protective equipment regularly. Although this situation has to be examined in more detail, the insufficiency of protective equipment has been

seen for at least this case. In addition, another striking result in the case is that our case's sense of smell has not yet returned to normal despite the disease. Detailed studies may be required on this subject.

Another important result is that the nurse experienced feelings of anxiety, fear and loneliness and did not tell them about this difficult process to protect her family and had to take this disease alone. The Covid-19 pandemic process, which led to pessimism and hopelessness, most affected the lives of nurses. Nurses focused on controlling this process and keeping patients alive, leaving their own lives aside. They had to stay away from their families, loved ones, and private lives for the sake of performing their profession. On such a challenging path, they still give their patients the treatment and care with compassion and patience, revealing the holiness of the nursing profession once again.

#### **Conflict of Interest**

There is no conflict of interest.

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