

Physiological and Psychological Effect of Covid-19 Pandemic on the Nurses: A Qualitative Study

Melike YAVAŞ ÇELİK* and Ebru OZTURK COPUR

Kilis 7 Aralık University, Yusuf Şerefoğlu Faculty of Health Sciences, Department of Nursing, Turkey

*Corresponding author: Melike YAVAS CELIK, Kilis 7 Aralık University, Yusuf Şerefoğlu Faculty of Health Sciences, Department of Nursing, Turkey, Tel: 0348 814 30 95, E-mail: www_com_tr@hotmail.com

Volume 2	Issue 1
Pages	6-13
Received	February 12, 2021
Accepted	March 25, 2021
Published	March 27, 2021

Citation: ÇELİK MY, OZTURK COPUR E. (2021) Physiological and Psychological Effect of Covid-19 Pandemic on the Nurses: A Qualitative Study. J SARS-CoV-2 COVID 2:003.

Abstract

Aim: The aim of this study to identify the effect of Covid-19 pandemic on the nurses.

Method: This was a descriptive and qualitative study, it was conducted on 10-20 June 2020 with the participation of 15 nurses who agreed to join the research on the basis of the application of the snowball sampling technique.

Findings: As per the study results, it was found 3 themes; Thema I: Physiological effects of the pandemic in nurses, II. Thema: Psychological effects of the pandemic on nurses, Thema III. Nurses do not have enough equipment to protect against Covid-19.

Conclusion: According to these themes; It has been determined that the nurses have problems with nutrition and water consumption, they are sleepless and tired, and the society does not take the necessary measures against the Covid-19 pandemic, and they have concerns about the possibility of being Covid-19 patients, stigmatization and losing their lives.

Keywords

Covid-19, Pandemic, Nurses

Introduction

Coronavirus infectious disease (Covid-19) which emerged in December 2019 in Wuhan city in China affected the entire world [1]. The spread of the infection through droplets paved the way for its fast proliferation. Fast spread of the disease caused the number of infected people to be higher than expected [1,2]. After a short while, in March 2020, the World Health Organization (WHO) declared Coronavirus (Covid-19) outbreak as a pandemic [3].

Nurses came at the top of those who fought against various diseases and pandemics throughout history. Nursing is a professional occupation which has a scientific foundation. Ethics, philosophy, theory and nursing models are among the scientific and professional components of the nursing occupation [4]. Endowed with these qualifications, nurses plan the steps of nursing process by examining patients, and help patients return to normal conditions by providing them with healthcare [5,6]. Also throughout this pandemic, nurses were always in the frontline and were confronted with life-threatening risks with a view to fulfilling their duties. Nurses who were in close contact with Covid-19 patients were defenseless against the infection and were

faced with the danger of spreading the virus to both their co-workers and family members [7,8].

In the announcement released by the International Council of Nurses (ICN) on 6 May 2020, 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 [9].

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 protect or 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

cellphone. Also, nurses are exposed violent because 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 [10,11].

Moreover, as per the current situation analysis report published on Covid-19 by the Turkish Nurses Association, 55.7% of nurses have shifts lasting 24 hours, 58.6% of nurses work for 40-48 hours per week and 35.3% of nurses provide healthcare for 10 or more patients. It was found that, in the units where they served, 82.1% of nurses provided healthcare for patients diagnosed with Covid-19. Furthermore, it was asserted that 50.1% of nurses were not provided with meals necessary for a sufficient and balanced diet in their service units [12]. During this outbreak, nurses have lead to experiencing stress and struggle to making an effort with this situation. Evidence from studies on COVID-19 reflects high concern among nurses for personal or family health in the face of direct contact with a potentially deadly virus and the stress of balancing this concern with the ethical obligations of continuing to provide care [13,14].

Elevating nurses' emotions and enhancing their ability to configure strategies for coping effectively with this situation are of utmost importance to the prevention and the control of the pandemic. More efforts should be devoted to the management of anxiety and stress in this group, and assistance in dealing with these situations should be offered. This study was performed for identifying the effect of Covid-19 pandemic on nurses.

Method

Research type

This was a qualitative and descriptive study.

Research population and sample

Research population covers all nurses serving in a government hospital in a small city. For sample selection, the snowball sampling technique was utilized. Research sample was composed of 15 nurses who agreed to participate in the research, worked for different units (Different clinics were selected to compare the difficulties experienced by the nurses working in each unit) and responded adequately (Those who can give complete answer to the interview question, those who do not pass with a short answer) to the questions. Nurses working in the covid-19 ward were also included in the sampling. Because it was aimed to investigate how the working shifts of nurses working in the covid-19 ward. Participation in the research was on a voluntary basis. 26.6% (4) of the participants were in the intensive care unit, 20.1% (3) in the covid service, 20.1% (3) in the emergency room, 13.3% (2) in the general surgery service, 13.3% (2) in the chest service 6.6% (1) work in the

delivery room.

Nurses who are working in the Covid service have been called this service from internal service. Nurses' ages are between 26 and 43-years-old. 40% (6) of the nurses work 60 hours or more, 40% (6) 40-60 hours, 20% (3) work 40 hours. 40% of the nurses (6) have worked for 3-5 years, 33.4% (5) for 6-8 years, 26.6% (4) for 10 years or more.

Collection of data

The study was conducted with 15 participants on 10-20 June 2020. Information on the aim and coverage of the study and a notification stating that the participation in the study was voluntary were presented at the beginning of the questionnaires which were sent to the participants. Personal identification information of the participants was not registered on the questionnaires. Inclusion criteria were to volunteer to take part in the study and to respond to the questions adequately. Three participants who failed to respond to questions properly were left out of the study.

As the data collection tool, semi-structured interview form which was prepared in light of the relevant literature and socio-demographic questionnaire were used. Before preparing the following questions, the literature was reviewed, preliminary interviews were made with the nurses, and the problems were identified, and then a questionnaire was created.

Socio-demographic questionnaire: The questionnaire contained questions on the age, family type, number of children, service unit, years of service and the number of weekly work hours of nurses.

Semi-structured interview form: The form which was prepared as per the relevant literature included questions which were designed for evaluating the effect of the pandemic on nurses' psychological state, quality of life, thoughts about the future and communication with patients.

Questions of the semi-structured interview form:

- How did Coronavirus (Covid-19) pandemic affect your psychological state?
- How did Coronavirus (Covid-19) pandemic affect Psychological state?
- Do you have enough equipment to protect against covid-19?

Application of the research

Research data were remotely collected by researchers through video calls because face-to-face communication was inconvenient due to the pandemic. Interviews were recorded. Firstly, information on the research was introduced to the participant, and partic-

participant's consent for participating in the research was received. As the participant was in a remote location, individualized in-depth interview technique was employed. Participants were selected through snowball sampling method. A time period which was out of participant's work hours was scheduled for the interview, and it was assured that nurses could comfortably respond to the questions. Considering the busy work hours of the nurses, the interview period was limited to maximum 20 minutes. The interview was finished once the interviewer started to identify redundancies in the collected data.

Analysis of data

For the analysis of data, the descriptive analysis was utilized. Firstly, for the accuracy of the data in the interview, the answers to the questions were confirmed with the nurses participating in the study. After that, a framework was created for data analysis. Under what themes the data would be grouped was specified alongside this framework. Subsequently, data grouped as per the created framework were read, categorized, defined and coherently compiled together. Each researcher made separate descriptions and the separately described texts were compared, and it was identified that researchers' separate descriptions presented similar results.

Ethical aspect of the research

For performing the research, permission was obtained from the Ethics Committee of Kilis 7 Aralık University. The aim of the research was referred to in the form which was created in digital format, and the voluntary basis of the participation was emphasized prior to the application of the research. This study was designed and conducted in compliance with the principles of the Declaration of Helsinki.

Results

Health staffs are professionals who are in constant communication with patients, spend a long time with them and are in the front line of the fight against Covid-19. That is why, healthcare workers are faced with challenging problems such as vulnerability to pathogens, long hours of work, psychological problems, fatigue, occupational burnout, stigmatization and physical and psychological violence [15,16]. In this study, it was found that 40% of nurses worked for more than 60 hours (Table 1). Also, 26.6% (4) of the participants were in the intensive care unit, 20.1% (3) in the Covid service, 20.1% (3) in the emergency room, 13.3% (2) in the general surgery service, 13.3% (2) in the chest 6.6% (1) work in the delivery room. However, it is recommended that nurses work in more regular short shifts. In addition, nurses working in covid-19 clinics should be rested at appropriate intervals and regular covid-19 tests should be performed [17].

Nurses who are working in the Covid service have been called this service from internal service. 26.6% (4) of the nurses work in the Intensive Care Unit, 20.1% (3) in the Covid-19 service and emergency room, 13.3% (2) in the emergency room and chest diseases service, 6.6% (1) work in the delivery service. Nurses' ages are between 26 and 43-years-old. 40% (6) of the nurses work 60 hours or more, 40% (6) 40-60 hours, 20% (3) work 40 hours. 40% of the nurses (6) have worked for 3-5 years, 33.4% (5) for 6-8 years, 26.6% for 10 years or more. 53.3% (8) of the nurses live in the nuclear family, 26.6% (4) in the extended family, and 20.1% (3) in the A single-parent. 33.3% of the nurses have (5) 1 child, 53.3% have 2 to 3 children, 13.3% (2) have 3 to 4 children.

Theme I: Physiological effects of the pandemic in nurses

Sub-Theme 1: Problems (weight loss, thirsty, not enough feeding) with Nurses' Nutrition and Water Consumption

Nurses reported that in the Covid pandemic, they could not feed and consume water due to their intense

Table 1: Demographic characteristics of nurses.

	n = 15	%
Service Unit		
Covid-19 Service	3	20.1
Intensive Care Unit	4	26.6
Delivery Service	1	6.6
General Surgery Clinic	2	13.3
Emergency Service	3	20.1
Chest Diseases Service	2	13.3
Work Hours Per Week		
40 hours	3	20
40-60 hours	6	40
60 hours or above	6	40
Family Type		
Nuclear Family	8	53.3
Extended Family	4	26.6
A single-parent	3	20.1
Age		
26-30 years	8	53.3
32-35 years	5	33.4
39-43 years	2	13.3
Number of Dependents(only their dependent children)		
1 child	5	33.4
2-3 children	8	53.3
3-4 children	2	13.3
Years of Service		
3-5 years	6	40
6-8 years	5	33.4
10 years or above	4	26.6

working conditions and the clothes they wear. In the WHO publication released on 19 March 2020 for the purpose of giving support to healthcare workers, it was clearly stated that healthcare workers had no satisfactory conditions in terms of occupational health and job security and they should be supported on this topic. Moreover, measures to be taken, roles to be played and responsibilities to be assumed by healthcare workers were also highlighted in this publication [15,18]. The statements of the nurses are as follows;

"We're tired of eating sandwiches all the time. They closed the cafeteria due to covid-19. He always gives us the same food; sandwich and milk. How can we feed on that constantly. In addition, we often forget to eat and drink water in these clothes. I lost 5 kilos since the covid pandemic started"(Participant 1).

"I am uneasy. When I am home, I cannot have a rest, I am unable to pay attention to my nourishment and personal hygiene; I do not know how I am supposed to fight with coronavirus." (Participant 2).

"We work so hard that sometimes I can't afford to eat. It even happens that I don't drink water all day"(Participant 6).

"It is very difficult to act in these clothes we have to wear to protect against covid-19. Also, it is necessary to remove the clothes to drink water or eat something. Whereas it is very difficult to take off and put it back on, and there is a lot of work to do, obviously I can't pay much attention to my diet"(Participant 8).

Sub-Thema 2: Sleeplessness and tiredness

Nurses suffer from insomnia and tired due to their busy working conditions. They also state that they have no opportunity to rest. Participants' statements are below:

"Our working conditions are very intense. Most of the time, when I come home from duty, the workplace calls me back to work. Our working hours are very long, sometimes 24 hours, sometimes 36 hours. We do not have the opportunity to sleep. There is no nurse to work, a nurse becomes covid-19 every day or a relative of the nurse gets sick. If it goes on like this, they will not find a nurse to work soon"(Participant 3).

"We work so hard that we learned to sleep standing up. Our brain sleeps sometimes, we work. I am too tired"(Participant 2).

"Our working hours are very long and patients are in very bad condition, we cannot rest from dealing with them. We do not have a holiday except for the guard exits. We are constantly working, we cannot spare time for ourselves"(Participant 4).

Thema: Psychological effects of the pandemic on nurses

Along with this study, it was identified that the psychological state of the nurses was negatively affected in the period of Covid-19 pandemic. Nurses reported that they needed psychological support, had the feeling of apprehension, were scared, failed to express themselves, missed their families and had the fear of death. We determined nurses live about worry because society is insensitive in carrying out Covid-19 measures, nurses have Covid-19 disease or fear of death.

Sub-Thema 1: Concerns about the society that they do not take the necessary measures against the Covid-19 pandemic

"I cannot explain my feelings, even if I explain, you cannot understand, you should be in this profession; we persistently ask people to stay home, do they understand? No, everyone is outdoors, I wish you put yourself in our shoes; so that the people would be safe, we left our families behind, we gave ourselves up, we fight against this virus by leaving all our basic needs aside. Even if we explain, nobody understands, nobody he bars our voice."(Participant 7).

"Why is nobody obeying the rules, we are working under difficult conditions. When people don't wear masks, I don't want to work. I make such a sacrifice for these people. I'm really worried that the disease will spread more and more people die. While everyone lives according to their tastes, we care and treat covid-19 patients without fear of death. this is really too cruel. I am sad and angry"(Participant 13).

Even though the stress at optimum level motivates people and helps them, the burnout can come into play if it reaches a level which is above the person's ability to cope with the stress [19]. It was argued that healthcare workers were confronted with the risk of burnout syndrome [15,16].

The existence of nurses who are capable of showing compassion and patience even under such challenging conditions is a striking result. This result once more demonstrated the power of nurses and underlined that they devotedly fulfilled the role of defending the patient rights.

Sub-theme 2: Nurses have Covid-19 disease or fear of death

In the research which McAlonan, et al. [20] performed with the participation of 176 healthcare workers by employing the Depression, Anxiety and Stress Scale-21 (DASS-21), it was identified that healthcare workers had higher depression, anxiety and stress scores than the rest of the population [20]. In a simi-

lar vein, in the study conducted by Lai, et al. [18] with the participation of 1,257 healthcare workers in China during the Covid-19 pandemic, it was found that the healthcare workers had high levels of stress, anxiety and depression [18]. Moreover, in the announcement made by International Council of Nurses (ICN) on 6 May 2020, it was declared that 90,000 healthcare workers were infected with Covid-19 and more than 260 nurses died of Covid-19 [12]. These results are in support of participant nurses' remarks in this study in which they stated that they had fear of death and were concerned about their health. That is below answer of Participant;

"I approach each patient with fear, also we work so busily that I do not even want to see any patient from now on, I am fed up, exhausted."(Participant 1).

"I am afraid from this disease, we should get away from patients as soon as possible in order to avoid having contact with them. I don't want to die. But, I feel sorry for the patients. I show more affection to patients than ever before. The pain they experience while trying to breathe is really bad."(Participant 3).

"My psychological state was negatively affected. There is a lot of pressure on me. My anxiety reached the level of illness. I was obsessed, my hands ache because I wash often; I don't even want to breathe."(Participant 8)

"I Worried about covid-19, uncertainty in the process is tiring and fearing, I am under intense stress, just as if I suffocated." (Participant 9).

"I always think if I would be infected and get treatment. I feel just as if I would have to be separated from my child, I am frightened." (Participant 10).

"I miss my family a lot, if something bad happens to me, I am afraid that I will die alone with no chance to hug them."(Participant 14).

In the study which was carried out by Kwek, et al. [21] after three months following the recovery from SARS for identifying the psychological state and quality of life of those who had SARS treatment, it was ascertained that healthcare workers obtained lower scores from the Health-Related Quality of Life Questionnaire (Short Form/SF-36 Health Survey) than other patients did [21]. Low quality of life which was identified for healthcare workers by the study performed in the context of SARS epidemic highlights a similarity to the Covid-19 period. In nurses' statements, it was alleged that their quality of life fell down. They stated that they stayed away from their homes, had shortcomings in meeting their physiological needs such as the sleep, nutrition and toilet use, this disease got settled at the center of their lives and they felt themselves confined. That individuals feel safe for themselves and their families without feeling under pressure, having any material or spiritual concern

and being frightened for their health is important both to the spiritual well-being and to the quality of life. As a natural, normal and necessary reaction, people feel stress when they are confronted with a dangerous situation. The stress is accompanied particularly by feelings of anger and indignation. The feeling of pessimism comes into play as a secondary feeling if the individual fails to cope with the stimulants which give rise to the stress. The most explicit psychological disorders which are experienced by individuals due to the stress are anxiety, depression, insomnia and fatigue [22,23]. Also as per this current study, in parallel to the relevant literature, it was identified that nurses were pessimistic about the future and had feelings such as apprehension, fear and anxiety.

In a study performed during the SARS epidemic, it was reported that several mental disorders such as panic attacks, anxiety, depression, suicidality, psychomotor excitement, psychotic symptoms and delirium were identified [24]. Moreover, individuals who were in socially isolated quarantine at home were diagnosed with stress disorder [25].

Sub-Thema 3: Nurses are Covid-19 infectious and experiencing stigma

Nurses are considered to be contagious of Covid-19, according to WHO. Therefore they face the problem of stigma. Also, this situation exhausts them and puts them at risk of burnout [15]. It was asserted that the fear of getting sick and dying, stigmatization and feeling of helplessness were experienced during pandemics [26,27]. According to the results of the study, nurses see it as the contagious of the Covid-19 disease. When people see them, they change their ways and are afraid of them. The statements of the nurses on this subject are as follows;

"I feel a high-level anxiety about infecting someone with the disease, this disease is highly dangerous; considering the damages inflicted on the people by the disease, I am very frightened. Negative results which will arise in the future make me feel uneasy. Moreover, I feel as if I was a murderer." (Participant 5)

"When neighbors see me, they change their ways, they avoid communicating with me. When I say hi, they don't talk to me. They treat me like I'm a monster"(Participant 8).

"Once on my way to work I could not find someone to take care of my son. I had to ask my neighbor for help, today I wanted to from her take care of my son. My neighbor's answer to me is you are a nurse, there is an epidemic of covid-19, your family has covid-19 and I cannot take care of your son. I could not find anyone to leave my child that I will never forget that day."(Participant 13).

Thema III. Nurses do not have enough equipment to protect against Covid-19

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 in sufficient equipment and in terms of prevention wastage. In order to reduce the loss of personal protective equipment while they are working, they put off eating food and drinking water [10,11].

“Certainly, it affected, the disease got settled at the center of my life; in the end, the death is highly likely, this is a likelihood to which we should pay utmost attention. However, we do not have adequate equipment for protecting us and each of us is given a mask per shift, and the mask gets dirty, how are we supposed to protect ourselves from this disease, is it achievable with a mask?” (Participant 4).

“We are allocated just one mask per day; as per our nourishment, cafeteria was closed down, meal boxes are given, how can you work 24 hours with a mask. Our protective equipment is insufficient. We cannot even find soap in the hospital so that we can wash our hands. We supply our equipment ourselves. It is impossible for us to work with the only mask provided by the hospital. I cough, I wanted to be tested, but my request was rejected as I did not have fever, and now I still work when I am sick (Participant 5).

Conclusion

In conclusion, this pandemic period negatively affected nurses' physiological and psychological state. In research, Nurses live problems about nutrition and water consumption of nurses, no sleep and tired, worry because society is insensitive in carrying out Covid-19 measures, nurses have Covid-19 disease or fear of death, nurses are covid-19 infectious and experiencing stigma. Moreover, it was identified that they had an increased work tempo, were away from home, Covid-19 occupied a central place in their lives, they felt themselves confined, failed to meet their personal needs, had shortcomings in satisfying their physiological needs, spent extra time on hygiene, failed to spare time for their families and themselves and had economic problems. It was discerned that being freed from the pandemic and returning to the normal routine in life were the best hopes of nurses who had distorted processes of dreaming about the future. Covid-19 period which gave rise to pessimism and hopelessness affected mostly nurses' lives. By leaving their own lives aside, nurses focused on controlling this process and ensuring the survival of patients. For the sake of performing their profession, they were forced to stay away from their families, loved ones and private lives. Nurses once more displayed the sanctity of this profession by stating that they still showed

compassion and patience toward their patients in such a challenging episode (Appendix).

Conflict of Interest Statement

The authors report no actual or potential conflicts of interest.

References

1. Ho CS, Chee CY, Ho RC (2020) Mental Health Strategies to Combat the Psychological Impact of COVID-19 Beyond Paranoia and Panic. *Ann Acad Med Singapore* 16: 155-160.
2. World Health Organization (WHO) (2020) Clinical Management of Severe Acute Respiratory Infection When Novel Coronavirus (Ncov) Infection Is Suspected.
3. World Health Organization (WHO) (2020) Director-General's Opening Remarks at the Media Briefing on COVID-19 - 11 March 2020.
4. Sert E, Erkal Y, Tuna ON (2014) Ebelikte Roy Adaptasyon Modeli'ninAntenatal Değerlendirmede Kullanımı. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi* 3: 1147-1160.
5. Vicdan AK, Karabacak BG (2016) Effect Of Treatment Education Based on the Roy Adaptation Model on Adjustment of Hemodialysis Patients. *Clinical Nurse Specialist* 30: E1-E13.
6. NANDA-I International (2014) Nursing Diagnoses definitions and classification 2015-2017. Wiley Blackwell.
7. Lu W, Wang H, Lin Y, Li L (2020) Psychological Status of Medical Work force During the COVID-19 Pandemic: A Cross-Sectional Study. *Psychiatry Research* 112936.
8. Lin CY, Peng YC, Wu YH, Chang J, Chan CH, Yang DY (2007) The Psychological Effect of Severe Acute Respiratory Syndrome on Emergency Department Staff. *Emergency Medicine Journal* 24: 12-17.
9. The International Council of Nurses (ICN) (2020) ICN Calls for Data on Healthcare Worker Infection Rates and Deaths.
10. Jiang L, Broome ME, Ning C (2020) The Performance and Professionalism of Nurses in the Fight Against the New Outbreak of COVID-19 Epidemic is Laudable. *International Journal Of NursingStudies* 107: 103578.
11. Karasu F, Çopur ÖE (2020) Koronavirus (COVID-19) Vakaları Artarken Salgının Ön Safındaki Bir Yoğun Bakım Hemşiresi:“CEPHEDE DURAN KAHRAMANLAR”. *Yoğun Bakım Hemşireliği Dergisi* 24: 11-14.
12. Türk Hemşireler Derneği (THD) (2020) COVID-19 Mevcut Durum Analiz Raporu5 27 Nisan 2020.
13. Jiang Y (2020) Psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of Coronavirus Disease 2019 (COVID-19) in Hubei, China. *Medical Science Monitor* 26: e924171.
14. Jackson D, Bradbury-Jones C, Baptiste D, Gelling L, Morin K (2020) Life in the pandemic: Some reflections on nursing in the context of Covid-19. *Journal of Clinical Nursing* 29: 13-14.
15. World Health Organization (WHO) (2020) Coronavirus Disease (Covid-19) Outbreak: Rights, Roles and Responsibilities of Health Workers, Including Key Considerations for Occupational Safety and Health.

16. Mason DJ, Friese CR (2020) Protecting Health Care Workers Against COVID-19 and Being Prepared for Future Pandemics. In *JAMA Health Forum* 1: E200353-E200353.
17. Huang L, Lin G, Tang L, Yu L, Zhou Z (2020) Special attention to nurses' protection during the COVID-19 epidemic. *Critical Care* 24: 120.
18. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. (2020) Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA Network Open* 3: e203976.
19. Akgün E (2014) Annelerde Stres ve Tükenmişlik. *Journal Of Human Sciences* 11: 238-250.
20. McAlonan GM, Lee AM, Cheung V, Cheung C, Tsang KW, Sham PC, et al. (2007) Immediate and Sustained Psychological Impact of an Emerging Infectious Disease Outbreak on Health Care Workers. *The Canadian Journal Of Psychiatry* 52: 241-247.
21. Kwek SK, Chew WM, Ong KC, Ng AWK, Lee LSU, Kaw G, et al. (2006) Quality of Life and Psychological Status in Survivors of Severe Acute Respiratory Syndrome at 3 Months Post discharge. *Journal of Psychosomatic Research* 60: 513-519.
22. Bień A, Rzońca E, Kańczugowska A, Iwanowicz-Palus G (2016) Factors Affecting the Quality of Life and the Illness Acceptance of Pregnant Women With Diabetes. *International Journal Of Environmental Research And Public Health* 13: 68.
23. Drury J, Carter H, Cocking C, Ntontis E, TekinGüven S, Amlôt R (2019) Facilitating Collective Psychosocial Resilience in The Public in Emergencies: Twelve Recommendations Based on the Social Identity Approach. *Frontiers in Public Health* 6: 141.
24. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. (2020) Timely Mental Health Care for the 2019 Novel Coronavirus Outbreak is Urgently Needed. *Lancet Psychiatry* 7: 228-229.
25. Severance EG, Dickerson FB, Viscidi RP, et al. (2011) Koroonaiviirus COVID-19 JaSkisofreenia. *Schizophr Bull* 37: 101-107.
26. Hall RC, Hall RC, Chapman MJ (2008) The 1995 Kikwit Ebola Outbreak: Lessons Hospitals and Physicians Can Apply to Future Viral Epidemics. *General Hospital Psychiatry* 30: 446-452.
27. Rubin GJ, Potts HWW, Michie S (2010) The Impact of Communications About Swine Flu (Influenza A H1N1v) On Public Responses to the Outbreak: Results From 36 National Telephone Surveys In the UK. *Health Technology Assessment* 14: 183-266.

Appendix

What is known about the subject and what the study adds

- ✓ Nurses worked under very severe conditions during the pandemic period. Communicated one-on-one with the patients and evaluated the patient and his family together within the frame work of holistic care.
- ✓ Many nurses either died or became ill due to Covid-19.
- ✓ Dueto Covid-19, nurses' social life, family life and private life have been negatively affected.
- ✓ Nurses were overwhelmed by taking the responsibilities of the patients and their families.
- ✓ This study is a proof that nurses, who are the heroes of the pandemic process, express their difficulties during this period and do not receive the necessary support. Nurse deaths and sickness rates are unfortunately not clearly revealed, they have tests, and they experience quite difficult processes in receiving treatment and care services during the disease process. In addition, they provide treatment and care services for hours without comfort in the clothes they have to use during the pandemic process. Infact, many healthcare workers have painful sores on their nose and face due to the use of masks.

Open Access Declaration

This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source of content.
