

RESEARCH ARTICLE

DOI: 10.4274/cjms.2021.2021-132

Impacts of the COVID-19 Pandemic on Nurses: A Qualitative Study

Dal Yılmaz and Bayraktar. Impacts of the COVID-19 Pandemic on Nurses

Ümran Dal Yılmaz, Nurhan Bayraktar

Department of Nursing, Near East University Faculty of Nursing, Nicosia North Cyprus

Abstract

BACKGROUND/AIMS: Nurses are the largest healthcare professional group providing frontline care in COVID-19. Because COVID-19 is a new disease and the medical system and culture of different countries varies, researches are needed on the effects of the pandemic on nurses to increase evidences. This study was performed to explore the impacts of the COVID-19 pandemics on nurses.

MATERIALS AND METHODS: This qualitative study was conducted using mass media and social media settings between March 11 and May 15 2020. A total of 31 nursing statements were examined.

RESULTS: Analysis of the statements of the Turkish nurses about impacts of the COVID-19 pandemics has emerged four main themes of “emotions”, “self-health”, “patient care” and “employee rights”.

CONCLUSION: Management strategies to support coping of the nurses with emotions, self-care, patient care and employee rights issues should be developed.

Keywords: COVID-19, coronavirus disease, pandemic, nursing

To cite this article: Dal Yılmaz Ü, Bayraktar N. Impacts of the COVID-19 Pandemic on Nurses: A Qualitative Study.

ORCID IDs of the authors: Ü.D.Y. 0000-0002-9482-6983; N.B. 0000-0002-3072-5788.

Address for Correspondence: Nurhan Bayraktar

E-mail: nurhan.bayraktar@neu.edu.tr

ORCID ID: orcid.org/0000-0002-3072-5788

30.05.2021

22.09.2021

INTRODUCTION

In today’s modern world, millions of people are at severe risk of acquiring evolving viral infections (1). A novel coronavirus disease (COVID-19) was first reported and then became widespread within Wuhan, China, in November 2019. The disease has rapidly spread

becoming a global health emergency (2,3). Since the first case of unexplained pneumonia in Wuhan, COVID-19 has affected many countries worldwide, over 131 million cases and over 2.8 million deaths were reported globally (2,4,5). The COVID-19 pandemic was confirmed to have reached Turkey in March 2020, with the first case being officially confirmed on 11 March 2020. As of 5 April 2020, the number of confirmed total cases in the country is over 3.5 million, of which 3.130.977 have recovered and 32.456 have died (6).

Coronaviruses are a large family of viruses which may cause illness in animals or humans (2,7). COVID-19 mainly causes respiratory and digestive tract symptoms, with symptoms ranging from mild self-limited disease to systemic multiple organ failure syndrome (4). COVID-19 may associate Intensive Care Unit (ICU) admission, mechanical ventilation and causes high mortality. In general, the disease is an acute illness but it can be deadly, with an average case fatality of 2% (5). Until now, there are no particular medications or vaccines against COVID-19 infection for human therapy (8,9). The medical treatment and nursing care mainly include antiviral and traditional medicine treatment, isolation, symptomatic support, and close monitorization (4).

There have been many negative affects of the COVID-19 pandemics on communities all over the world. As a disaster condition, the pandemic has been causing a serious disruption of the functioning of communities involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected society to cope using its own resources (10). In this context, medical workers have important responsibilities against the epidemic. Unfortunately, many front-line personnel have sacrificed their own well-being and have been infected or died (4). The mental health of healthcare staff has also been greatly challenged during the viral epidemic (11).

In this global crisis, nurses are the largest healthcare professional group providing frontline care. Nurses' have pivotal roles in the care and management of the novel COVID-19 (5). They are in a natural position to take an active role in disaster management because they spend the most time with clients, they have the expertise to provide clinical care, team leadership, and creative problem-solving skills (12). To recognize the vital service of nurses to health care, the World Health Organization designated 2020 as the International Year of the Nurse and Midwife, and in this year, worldwide, and nurses currently facing challenges from the COVID-19 pandemic (13). Clinical nurses experience great stress when they were fighting against COVID-19 with needs for health, safety, interpersonal relationships, and related knowledge (14).

In Turkey, as well as in other countries, nurses are at the forefront of the struggle with COVID-19 in the healthcare team, together with the physicians. Nurses have pivotal roles in organization of health services, safety precautions, planning and implementing of care, providing training and evaluating the effectiveness of care in the fight against COVID-19. In Turkey, government took an effective role in resource allocation, education of the public about the precautions as top priority. Nurses' managers and Turkish Nurses Association also have active roles regarding providing protective equipment to nurses, to ensure appropriate nurse manpower, and to provide transparent information. However, as is the case all over the world, nurses are physically and psychosocially affected by the pandemic.

Because COVID-19 is a new disease and the medical system and culture of different countries varies, researches are needed on the effects of the pandemic on nurses to increase evidences. Understanding the impacts of the COVID-19 pandemics on nurses would be beneficial in developing strategies in coping further outbreaks. The aim of the study was determination of the impacts of the COVID-19 pandemics on Turkish nurses.

MATERIALS AND METHODS

Research Design

This study was performed retrospectively with a descriptive phenomenological approach to explore the effects of the COVID-19 pandemics on nurses. In this research, Colaizzi's descriptive phenomenological investigation method was followed (15).

Procedures

A semi-structured tool was used in this study to frame the data collection. The framework of the study included the following areas of questioning to search effects of the COVID-19 outbreak on nurses: What are the effects of the COVID-19 outbreak on the emotions of the nurses? What are the effects of the COVID-19 outbreak on the self-health of the nurses? What are the other effects of the COVID-19 outbreak on nurses?

The study was conducted using Turkish mass media (newspapers, TV channels, web pages of the nursing associations) and social media settings (Facebook and Twitter) between March 11 and May 15, in 2020, which is the beginning period of the outbreak. The search term including COVID-19 pandemic, was monitored daily by the two researchers. Nursing statements regarding the effects of the pandemic were recorded by hand writing and using mobile phones of the researchers, then transferred to Word documents. Content about the other healthcare professionals' statements was excluded. Confidentiality of the statements was assured by using numbers instead of names. A total of 31 nursing statements were examined.

Ethical Aspects

The ethical approval was obtained from University Review Board (2021/91-1347). Although data collection was performed from mass media and social media, statements of the nurses were recorded using participant numbers for confidentiality. Informed Consent was not provided because of the data collection method.

Statistical Analysis

Two coauthors analyzed the data simultaneously following Colaizzi's descriptive phenomenological steps. Content analysis was applied in the study. In this context, the researchers first transcribed the recordings and read the texts several times independently for familiarization. The researchers identified the statements that are of direct relevance to the effects of the COVID-19 outbreak on nurses. Then, they formulated meanings in statements and categorized meanings into clusters of common themes. Meaning and themes throughout the analysis process were compared and discussed by them until consensus on themes was achieved. Finally, a reflective process by returning to the participant statements from the original mass media or social media settings was performed for validation. In addition, an independent researcher who is experienced in phenomenological researches was asked to evaluate the consistency between the data and the themes and revisions were made in line with the suggestions.

RESULTS

The data about impacts of the COVID-19 pandemics on Turkish nurses were analysed under four main themes of "emotions", "self-health", "patient care" and "employee rights" (Table 1).

Emotions

"Emotions" theme was composed of clusters of themes including "Anxiety", "Fear", "Fighting", "Threatened", "Anxiety of family members", "Concern about contamination of microorganisms", "Separation", "Craving", "Fear", "Panic", "Sadness", "Happiness" and "Motivation". Examples of the statements related to this category includes:

"At the beginning, I was more anxious, followed the literature constantly and always had the fear of being infected".

"We fight against COVID-19 at zero point, we are at risk".

"I left my son to my mother before starting work. We haven't seen each other for a month. We try to eliminate craving by talking in video. My child is without me these days..."

“When I was diagnosed with COVID-19, of course, I experienced fear and panic like everyone else”.

“I feel very sorry to see those who go out to socialize. People should be aware of the severity of the event”.

“The applause sounds of people on the balconies for healthcare workers motivated and made me feel better”.

Self-Health

“Fluid loss”, “Discomfort in breathing”, “Mask scars”, “The need to protect self- health”, “COVID-19 illness”, “Joint pain and respiratory distress due to COVID-19” and “Fatigue” were clusters of themes related to “Self-health” theme. Nurses stated followings:

“This is my fifteenth hour in these protective gowns. My lung faded from constantly taking my breath. In the overalls, I lost the water I drank, and lost it as much. The pit that the mask and visor opened on my face is not to mention...”.

“We, healthcare providers are not immune. It should not be forgotten that we are human beings. Who will take care of patients if we are not good? “

“I had a lot of trouble when I caught COVID-19. There were incompatible joint pains, respiratory distress”.

Patient Care

“Patient care” theme was including clusters of themes; “Increase in the number of patients”, “Challenge in providing effective care to a large number of patients”, “Discomfort of patients from protective measures” and “Increased risk of errors due to fatigue”. Examples of the statements related to this category as followings:

“We have to provide the care they deserve to a large number of patients with the same efficiency and sensitivity.”

“Prolonged work and fatigue of the nurses can increase the risk of errors”.

Employee Rights

“Employee rights” was another theme originated from clusters of themes including “Long working hours”, “Working without vacation”, “Workspace change”, “Underestimation”, “Not getting paid for labor”, “Violence”, “Recruitment increase”, “Insufficient protective equipments” an “Insufficient food”. Nurses stated followings:

“Nurses in intensive care are having difficulties. Sometimes we work with a few hours of sleep. There are nurses who have a 24-hour working duration”.

“Nurses can't make their voice heard enough. The phrase “physician and other healthcare personnel” is used as if it is only providing physicians with the entire service. However, nurses are the closest working group with patients 24/7.”

“Healthcare providers cannot get the salary they deserve. Nurses should be provided with additional funding during this process.”

“Under these difficult conditions, healthcare workers should not be exposed to violence”.

DISCUSSION

Results of the study were discussed with the themes including "emotions", “self-health", “patient care” and “employee rights”.

Emotions

The number of medical healthcare professionals (doctors, nurses, paramedics) suffering from mental health impacts after epidemics and pandemics are often greater than the physical injury (16). In the current study, it was determined that the nurses had anxiety and fear from contaminating from microorganisms. Nurses stated that they could not see their families for a long time and that they missed them. They expressed their sadness that some individuals in the community break the rule of staying home and do not obey the rules while they are working with devotion away from their families. Nurses who were diagnosed with COVID-19 and recovered stated that they experienced a feeling of fear and panic. In line, these

problems have been emphasized by Turkish Nurses Association's report (17). Emotional effects of the pandemic have also been emphasized in the international literature (3,4,11,18-20). Sun et al. (4) performed a study with the aim of exploration of the psychology of nurses caring for COVID-19 patients. They found that nurses had psychological helplessness, health threat, lack of knowledge, and interpersonal unfamiliarity under the threat of epidemic disease led to a large number of negative emotions such as fear, anxiety, and helplessness. In a study conducted to explore the mental health status of medical and nursing staff during the COVID-19 pandemic in Wuhan, trends in levels of psychological distress and factors such as exposure to infected people and psychological assistance were identified. A 36.9% of them had subthreshold mental health disturbances, 34.4% had mild disturbances and 22.4% had moderate disturbances in the immediate wake of the viral epidemic (11). A study showed that around 85% of the surveyed health care workers were afraid of becoming infected at work (18). Another study also reported that nurses are coping with the fear and anxiety of contracting the illness themselves and passing the disease on to friends and family (3). Nurses are parents, siblings, friends and partners with all of the worries and concerns shared by most people providing for and protecting ourselves and their families, and so in addition to caring for patients, the well-being of their own families weighs heavily on them as nurses at this time (21). In line, we found that the nurses stated that they were mutually concerned about each other's health with their families. In the relevant literature, it is emphasized that mental health services, efficacy of psychological care, and the assessment of psychological care needs is necessary for nursing staff (16). Mental healthcare and mental healthcare training need to be developed and implemented (22).

In addition to negative emotions, our participants also expressed their positive emotions such as happiness caused from recovery of the patients and motivation from social support and appreciation. A literature review also reported that nurses experience both positive and negative emotions including pride, fear, commitment and overwhelming emotion (10). In line, Sun et al. (4) found existence of positive emotions in nurses such as confidence, calmness, relaxation, and happiness. Optimism has a protective effect on psychological trauma under disasters.

Self-Health

Nurses expressed their experiences on their individual health. The importance of protecting their own health due to the risk of transmission of the disease was emphasized by many nurses. Sweating caused by the use of personal protective equipment, difficulty breathing, marks on the face of the mask were expressed as the main problems. In addition, the nurses who were diagnosed and recovered with COVID-19 stated that they had problems such as pain and respiratory distress. During disasters and infectious diseases, nurses sacrifice their own needs to actively participate in the work and make selfless contributions of their professional responsibility (4). A study showed physical health as a basic necessity required to overcome the epidemic, and their all respondents exhibited a strong need for maintaining health (14). Another study showed that resilience (tenacity, strength) and social support (objective support, subjective support and availability of support) could significantly predict the mental health in fresh staff. A high level of training and professional experience, resilience and social support were necessary for health care workers who are first taking part in public health emergence (19). It is helpful to take effective interventions to meet the needs of nurses caring for COVID-19 patients.

Patient Care

The statements of nurses reveal the responsibilities they feel about patient care and society. Their thoughts to give care to all patients with the same sensitivity, their emotional support to patients, their motivation for healing patients and their expressions about not to make mistakes show their nurses' sensitivity to care. However, it is important to provide nurses

with conditions under which they can effectively maintain healthcare. These issues also have been reported by Turkish Nursing Association. Turkish Nursing Association has reported that nurses face barriers to providing care in a manner that does not compromise patient safety (2,17). Zhang et al. (18) also emphasized that medical systems should ensure that frontline workers have enough time to rest between shifts, to avoid overwork and non-conscious errors during epidemic relief efforts.

Employee Rights

Nurses expressed their problems such as long working hours, insomnia, changing the clinic where they work, violence, not getting enough salary and inadequacy of meals. They also stated that the nurses could not make their voices heard, despite being the closest healthcare professionals working with patients 24/7. They expressed that they perceived themselves as warriors on the front. According to COVID-19 of the Turkish Nurses Association; 21.1% of the nurses cannot take a break while working, 58.3% of the them work 40-48 hours in a week and 50.0% have not been provided the necessary food for adequate and balanced nutrition (17). In a study, it was also reported that during the COVID-19 epidemic, some deficiencies were present as a major tertiary general hospital. Prediction capacity and strategic preparatory awareness for public health emergencies were not sufficient. This resulted in an evident lack of workforce and supplies at the beginning of the outbreak (23).

In this study, it was determined that nurses stated that protective materials were insufficient. Turkish Nurses Association also showed that nurses stated that they had frequently difficulty in reaching of the gloves (5.0%), medical mask (8.5%), visor or goggles (12.4 %) and disposable overalls (19.0 %), during care for the patients with COVID-19 (17).

In the current study, many nurses stated that they were transferred to the corona clinic. Transfer of the nurses to the pandemic clinics without their orientation was also indicated by Turkish Nurses Association as an important problem. According to report of the Turkish Nurses Association, nurses stated that they were not informed (13.1%) or partially informed (39.7%) about the measures that should be taken to protect themselves while providing care to the patient with COVID-19 diagnosis /suspect (17).

There are limitations of the current study that needs to be addressed. The search from social media was limited to the open accessible statements of the nurses by the researchers.

Individual interviews were not conducted in this study. Another limitation was accessing the participants individually for validation was not possible because of the data collection method of the study.

In conclusion, analysis of the statements of the Turkish nurses about impacts of the COVID-19 pandemics has emerged four main themes of “emotions”, “self-health”, “patient care” and “employee rights”. Results showed that the nurses stated anxiety and fear regarding contamination, and longing for their families. Nurses who were diagnosed with COVID-19 and recovered stated that they experienced a feeling of fear and panic. The statements of the nurses revealed their experiences about their individual health and coping with the problems, the responsibilities they felt about patient care and society. In addition, nurses expressed their problems such as long working hours, insomnia, changing the clinic where they work, violence, not getting enough salary, lack of personal protective equipment and food. It can be concluded that, nurses’ roles and responsibilities are substantial in coping with the COVID-19 pandemic to provide health care for. Related institutions and organizations, and nurse managers should develop management strategies to support coping of the nurses with emotions, self-care, patient care and employee rights issues. Establishing psychological coping support may contribute to fulfill the needs of nurses and protect their mental health. Social support, enough time to rest between shifts, to avoid overwork, providing the ideal nurse-topatient ratio, adequate supplies, and utilization of personal protective equipment would meet the needs for health and safety among nurses.

MAIN POINTS

- Statements of the Turkish nurses about impacts of the COVID-19 pandemics emerged main themes of "emotions", "self-health", "patient care" and "employee rights".
- Nurses stated anxiety and fear regarding contamination, and longing for their families.
- Nurses who were diagnosed with COVID-19 and recovered stated that they experienced a feeling of fear and panic.
- The statements of the nurses revealed their experiences about their individual health, the responsibilities they felt about patient care and society.
- Nurses expressed their problems such as long working hours, insomnia, changing the clinic where they work, violence, not getting enough salary, lack of personal protective equipment and food.

REFERENCES

1. Al-Hazmi A. Challenges presented by MERS corona virus, and SARS corona virus to global health. *Saudi J Biol Sci* 2016;23:507–511.
2. World Health Organisation (WHO). Coronavirus disease (COVID-19) pandemic. 2020. <https://covid19.who.int/>. Accessed April 5, 2021.
3. Stannard D. Covid-19: Impact on perianesthesia nursing areas. *J Perianesth Nurs* 2020;35:237-238.
4. Sun N, Wei L, Shi S, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control* 2020;4:592–598.
5. Paterson C, Gobel B, Gosselin T, et al. Oncology nursing during a pandemic: Critical reflections in the context of COVID-19. *Semin Oncol Nurs* 2020;36:151028.
6. Turkey Ministry of Health. Turkish daily COVID-19 data. Available from: <https://covid19.saglik.gov.tr/>. Accessed April 5, 2021.
7. Nursing Center. 2019 Novel Coronavirus Nurse Resources. Available from: <https://www.nursingcenter.com/coronavirus>. Accessed May 19, 2020.
8. Rothan H, Siddappa N. The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *J Autoimmun* 2020;109:102433.
9. Naserghandi A, Allameh SF, Saffarpour R. All about COVID-19 in brief. *New Microbes New Infect* 2020;35:100678.
10. Hammad KS, Arbon P, Gebbie K, et al. Nursing in the emergency department (ED) during a disaster: A review of the current literature. *Australas Emerg Nurs J* 2012;15:235-244.
11. Kang L, Ma S, Chen M, et al. Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain Behav Immun* 2020;87:11-17.
12. Smith RP. Making a case for integration of disaster-preparedness content in associate degree nursing programs. *Teach Learn Nurs* 2007;2:100–104.
13. Tsay SF, Kao CC, Wang HH, et al. Nursing's response to COVID-19: Lessons learned from SARS in Taiwan. *Int J Nurs Stud* 2020;108:103587.
14. Yin X, Zeng L. A study on the psychological needs of nurses caring for patients with coronavirus disease 2019 from the perspective of the existence, relatedness, and growth theory. *Int J Nurs Sci* 2020;7(2):157-160.
15. Sanders C. Application of Colaizzi's method: interpretation of an auditable decision trail by a novice researcher. *Contemp Nurse* 2003;14(3):292-302.
16. Mukhtar S. Mental well-being of nursing staff during the coronavirus disease 2019 outbreak: A cultural perspective. *J Emerg Nurs* 2020;46:426-427.

17. Turkish Nurses Association. Nurses' situation analysis. Available from: <http://www.thder.org.tr/uploads/files/EK-SB-Hemsirelerin-Durum-Analizi-5.Rapor.pdf>. Accessed May 19, 2020.
18. Zhang M, Zhou M, Tang F, et al. Knowledge, attitude and practice regarding COVID-19 among health care workers in Henan, China. *J Hosp Infect* 2020;105:183-187.
19. Cai W, Lian B, Song X, et al. A cross-sectional study on mental health among health care workers during the outbreak of Corona Virus Disease 2019. *Asian J Psychiatr* 2020;5:102111.
20. Xiang YT, Yang Y, Li W, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *Lancet Psychiat* 2020;7(3):228–229.
21. Jackson D, Bradbury-Jones C, Baptiste D, et al. Life in the pandemic: Some reflections on nursing in the context of COVID-19. *J Clin Nurs* 2020;10.1111/jocn.15257.
22. Usher K, Durkin J, Bhullar N. The COVID-19 pandemic and mental health impacts. *Int J Ment Health Nurs* 2020;209:315-318.
23. Liu Y, Wang H, Chen J, et al. Emergency management of nursing human resources and supplies to respond to coronavirus disease 2019 epidemic. *Int J Nurs Sci* 2020;7(2):135-138.

Table 1. Statements of the nurses regarding the impacts of the COVID-19 pandemics with themes

| Significant Statements | Theme Clusters | Emergent Themes |
|---|---|-----------------|
| "At the beginning, I was more anxious, followed the literature constantly and always had the fear of being infected". | Anxiety Fear | Emotions |
| "We fight against COVID-19 at zero point, we are at risk". | Fighting Threatened | |
| "We also know from examples in the world that this disease has a high risk of transmission to healthcare workers. Our families are also concerned with us". | Anxiety of family members | |
| "The anxiety of contamination of microorganisms from hospital to home affecting me psychologically". | Concern about contamination of microorganisms | |
| "I miss my family very much". "I left my son to my mother before starting work. We haven't seen each other for a month. We try to eliminate craving by talking in video. My child is without me these days..." | Separation Craving | |
| "When I was diagnosed with COVID-19, of course, I experienced fear and panic like everyone else". | Fear Panic | |
| "I feel very sorry to see those who go out to socialize. People should be aware of the severity of the event". | Sadness | |
| "I feel happy when patients recover". | Happiness | |
| "The applause sounds of people on the balconies for healthcare workers motivated and made me feel better". | Motivation | Self-health |
| "This is my fifteenth hour in these protective gowns. My lung faded from constantly taking my breath. In the overalls, I lost the water I drank, and lost it as much. The pit that the mask and visor opened on my face is not to mention..." | Fluid loss Discomfort in breathing Mask scars | |

| | | |
|--|---|------------------------|
| <p>“In this epidemic there is a risk of contamination to ourselves, and we have to protect ourselves”.</p> <p>“We, healthcare providers are not immune. It should not be forgotten that we are human beings. Who will take care of patients if we are not good? “</p> | The need to protect self-health | |
| I had a lot of trouble when I caught COVID-19. There were incompatible joint pains, respiratory distress. | COVID-19 illness Joint pain and respiratory distress due to COVID-19 | |
| “There is always fatigue”. | Fatigue | |
| “We have to provide the care they deserve to a large number of patients with the same efficiency and sensitivity.” | Increase in the number of patients Challenge in providing effective care to a large number of patients | Patient care |
| “Patients are afraid of our protective equipment such as masks, and protective gowns”. | Discomfort of patients from protective measures | |
| “Prolonged work and fatigue of the nurses can increase the risk of errors”. | Increased risk of errors due to fatigue | |
| <p>“Nurses in intensive care are having difficulties. Sometimes we work with a few hours of sleep. There are nurses who have a 24-hour working duration”.</p> <p>“We work day and night without leaving the clinic empty.”</p> | Long working hours | Employee rights |
| “When first cases in Turkey I was on annual vacation. I left my vacation and returned to my job at the intensive care unit.” | Working without vacation | |
| “I was transferred to the corona clinic from my clinic.” | Workspace change | |
| <p>“Nurses can't make their voice heard enough. The phrase “physician and other healthcare personnel” is used as if it is only providing physicians with the entire service. However, nurses are the closest working group with patients 24/7.”</p> <p>“Healthcare providers cannot get the salary they deserve. Nurses should be provided with additional funding during this process.”</p> | underestimation Not getting paid for labor | |
| “Under these difficult conditions, healthcare workers should not be exposed to violence”. | Violence | |
| It is positive that the Ministry of Health has increased nurse recruitment. | Recruitment increase | |
| “Personal protective materials are not enough. Meals are inadequate.” | Insufficient protective equipments Insufficient food | |