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Research Article

The Initial Experiences of intensive care unit staff during the COVID-19 pandemic in Turkey: A qualitative study

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Abstract

Objective: This study aimed to explore the initial experiences of intensive care unit (ICU) staff during the COVID-19 pandemic.

Methodology: A qualitative phenomenological study design was utilized. Data were collected in an ICU at İzmir Bozyaka Research and Training Hospital from March to June 2020. A total of 18 intensive care staff, comprising four physicians, 12 nurses, and two clinical support staff, were interviewed to describe their experiences during the COVID-19 pandemic. Thematic analysis techniques were applied to analyze the data.

Results: Thematic analysis of the interviews led to the identification of four main themes and six subthemes, including "definitions related to the pandemic," "emotional experiences," "challenges faced," and "expectations." These themes and subthemes are presented along with sample quotations from the participants.

Conclusion: The findings revealed that ICU staff's initial experiences of the COVID-19 pandemic were predominantly negative and highlighted the factors contributing to this perspective.

Keywords: COVID-19; Intensive care; Pandemic; Qualitative study

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Introduction

Coronavirus disease 2019 (COVID-19) is a respiratory illness caused by a virus called SARS-CoV-2 [1]. The virus was first identified in Wuhan-China in December 2019 and has since spread to more than 200 countries and territories. World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020, because the disease had rapidly spread to most countries and was causing serious problems for their health system [2]. COVID-19 has caused a significant burden on global health with over 767 million confirmed cases and 6.9 million confirmed deaths reported as of July 2023 [3].

Due to limited information about COVID-19, there were many difficulties in its control and treatment at first. The COVID-19 outbreak has gone down in history as the first pandemic caused by coronaviruses. The healthcare sector dealt with the worst worldwide pandemic crisis in a century [4] The first COVID-19 case in Turkey was officially confirmed on March 11, 2020. Since then, the spread of the pandemic and its mortality rate have dramatically increased [5].

The COVID-19 pandemic brought great difficulties to national healthcare systems across the world [6], and this is especially true for intensive care units (ICU). Countries' healthcare capacity and ICUs are critical for the effective management of the pandemic, as they are essential for treating critically ill patients. About a third of patients infected with COVID-19 had become critically ill and required intensive care [7]. Across OECD countries, there were on average 12 intensive care beds per 100,000 population in 2020 [4]. Turkey had the highest number of intensive care beds among OECD countries before the COVID-19 pandemic, with 48 beds per 100,000 population, according to the Republic of Turkey Ministry of Health [8]. However, Turkey has fewer doctors and nurses per population relative to many other OECD countries. In Turkey, there are 2.1 doctors and 2.7 nurses per 1,000 people [9].

Reports show that COVID-19 infection is more common among healthcare professionals and is associated with significant workforce issues [10]. New ICUs were opened in Turkey to meet the increasing need for intensive care during the COVID-19 pandemic. Consequently, healthcare workers who had not previously worked in ICUs were assigned to these units [11] However, the fast transition to unfamiliar workplace settings and inadequate preparation to practice may lead to high levels of stress and anxiety among healthcare workers, as they may feel unprepared for the challenges of working in an ICU [12] In this process, a variety of written and visual materials were provided by different nursing associations to support critical care nurses and other professionals, such as training modules, infographics, and videos [13].

This study aimed to explore the initial experiences of the ICU staff during the COVID-19 pandemic in Turkey.

Methodology

Study design and participants

A descriptive phenomenological methodology was used in this qualitative study. This design allows researchers to interpret human experience in various contexts, which may provide deeper insight into the phenomenon [14].

Sampling procedures are less strict in qualitative studies than in quantitative studies [15]. In this study, a purposive sampling method was implemented to provide a diversity of the sample. The data collection continued until data saturation. The sample size was 18 ICU staff, including 12 nurses, four physicians, and two health servants. Data saturation was reached after 18 participants were interviewed. The inclusion criteria consisted of ICU staff with a minimum of one month of experience in the current unit in which they were employed, being above 18 years old, and volunteering to participate in the study. All participants provided informed consent to participate, and there were no dropouts. Data were collected in an ICU in İzmir Bozyaka Research and Training Hospital, from March to June 2020.

Data collection

Individual in-depth semi-structured interviews were conducted to collect the study data. In qualitative studies, information from interviews can be recorded in handwritten notes, tape recordings, or videotaping [16]. In this study, each interview was tape-recorded with participants' permission and transcribed verbatim in Microsoft Word within 24 hours. A member of the research team conducted all interviews. The researcher avoided making any judgments during the interviews and encouraged the participants to narrate their experiences during the COVID-19 pandemic as freely as possible. Participants were interviewed in the resting spaces of the hospital during day shifts under quiet and calm conditions and their privacy was ensured. No one else was present besides the participants and the interviewer. The interviewer summarized the key findings after each interview to gain agreement. Interviews lasted about 40-60 minutes. Analysis and data saturation were discussed in regular research team meetings.

A semi-structured, pilot-tested questionnaire guided the data collection process. The questionnaire consisted of two sections: The first section included questions about the demographic and other descriptive characteristics of the ICU staff, such as age, gender, educational status, profession, and experience in the ICU. The second section consisted of six open-ended questions about the initial experiences of ICU staff during the COVID-19 pandemic. (Table 1) The questionnaire was prepared by researchers and based on a review of the literature. A probe technique was used to obtain more expressions during the interview (i.e., What did you think? How did it affect you? What else happened?). Before the study, the semi-structured questionnaire was pre-tested with two volunteers from different units.

1. How did you feel when the first patient with COVID-19 hospitalized in your unit?
2. Do you consider that the COVID-19 pandemic has affected your work?
3. Do you consider that the COVID-19 pandemic has affected your personal life?
4. How would you describe the COVID-19 pandemic process in a single sentence?
5. Do you have any expectations from the hospital managers or society?

Table 1: Interview Questions.

Data analysis

Thematic content was developed from participants' statements using computer-assisted qualitative data analysis techniques. A deductive approach based on the related literature and study questions was adopted to guide this study [16]. Initially, each interview was transcribed verbatim in Microsoft Word within 24 hours. Two researchers read all statements to gain overall comprehension. These researchers coded statements independently to increase reliability and ensure trustworthiness. Then, all relevant sentences were grouped into predetermined themes and subthemes as required. Finally, a consensus process was used to bring the researchers to mutual agreement by addressing all concerns.

Validity

The study team consisted of one ICU nurse (female) and two nurse academicians who had Ph.D. degrees (one female and one male). To establish data credibility, data collection was conducted by a member of the research team who was familiar with the context of the ICU environment with 21 years of experience. The research team reviewed transcripts together to assure confirmability. Two of the researchers were certified in qualitative data analysis, and they grouped the participants' sentences independently from each other. This study is reported following the Consolidated Criteria for Reporting Qualitative Research [17].

Research ethics

This study was approved by the Non-Invasive Research Ethics Committee of the Manisa Celal Bayar University and was conducted according to the principles of the Declaration of Helsinki. Besides, the researchers asked the Board of Directors of the hospital to give their permission for this qualitative study. Before each interview, the participants were informed about the purpose and context of the study, and then signed a consent form. This form also acknowledges that the rights of participants will be protected during data collection and analyses. Participation in the study was voluntary, and the confidentiality of participants was assured using codes in all processed and recorded data.

Results

Participants' characteristics

A total of 12 nurses, four physicians, and two clinical support workers participated in the study. Ages of participants ranged from 23 to 52 years with a mean age of 36.88 and were mostly female (n = 14; 77.8%). Half of them were married and most of them had bachelor's degrees (n = 14; 77.8%). They had 1–31 years of professional and 0.3–29 years of ICU experience. Besides, none of them was infected with COVID-19 before the interviews (Table 2).

Variable	N	Mean	SD	Range	Frequency	Percentage %
Age	18	36.88	9.23	23.00-52.00		
Gender						
Female	25				14	77.8
Male					4	22.2
Marital status						
Married	25				9	50.0
Single					9	50.0

Educational Status High school Bachelor's degree Postgraduate	25				2 14 2	11.2 77.8 11.0
Profession Nurse Physician Clinical support worker	25				12 4 2	66.7 22.2 11.1
Years in profession <15 years ≥15 years	25	14.44	9.94	1-31	9 9	50 50
Years in the current ICU <10 years ≥10 years	25	10.79	9.24	0.3-29	10 8	55.6 44.4
Level of Profession love (mean ± SD: 7.47 ± 1,80) (min-max 4-10) 7 below 7 and above					6 12	33.3 66.7
COVID-19 Status **Negative** **Positive**					18 0	100.0 0.0

Table 2: Descriptive characteristics of the participants.

Data analysis led to the development of six subthemes and four themes, namely, "definitions related to the pandemic," "feelings," "challenges confronted," and "expectations" (Figure 1) These themes and subthemes are presented below along with sample quotations from participants.

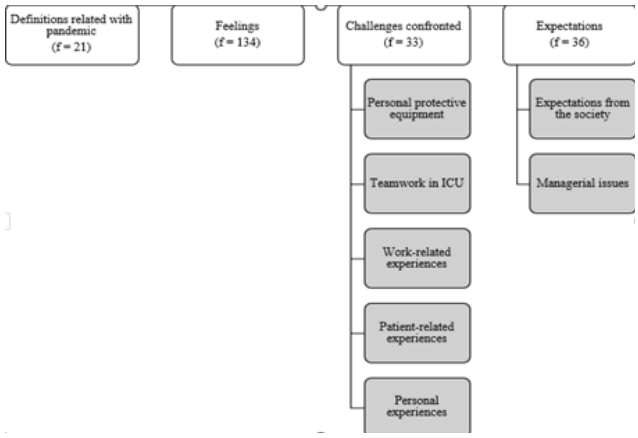

Figure 1: Themes and subthemes of the first experiences of intensive care unit staff during the COVID-19 pandemic.

Definitions related to the pandemic (f = 21)

ICU staff used various words such as confusion, nightmare, uncertainty, stress, despair, death, and prohibitions when describing the pandemic process.

Life is indeed full of surprises and should never be taken for granted. It is important to cherish every moment and appreciate the beauty that life offers. (P2, 30 years old, physician)

Nightmare, chaos, death, and despair. (P7, 39 years old, nurse)

Every bad experience gives you a new lesson. (P8, 28 years old, physician)

Excessive stress, fatigue, confusion. (P10, 52 years old, physician)

I long for everything to be the same again. However, the balance of the world is changing. (P11, 47 years old, health servant)

Four months have passed filled with death. (P12, 43 years old, nurse)

A period with prohibitions. (P13, 44 years old, nurse)

Feelings (f = 133)

The participants used various words, such as fear, anxious, stressed, panicky, helpless, and sad, a total of 133 times, to describe their feelings.

I thought I would get infected with COVID-19. I felt like the soldiers sacrificing themselves on the front lines of war. (P2, 30 years old, physician)

Anxiety and the fear of causing harm to my loved ones were the most intense emotions I experienced. (P7, 39 years old, nurse)

I was scared, thinking that I might be infected. Alongside that, I experienced feelings of anger and sadness because the effort I put into the intensive care unit was not being reciprocated. (P5, 30 years old, nurse)

The most intense feeling I experienced when the first patient with COVID-19 was hospitalized in our unit was fear. There were so many questions that needed to be answered. How would we get through this pandemic? Would we be infected? Would personal protective equipment (PPE) sufficiently protect us? I was afraid of losing my life due to this infection. (P15, 36 years old, health servant)

Anxiety about getting infected dominated my thoughts, leaving me confused about what to do. (P3, 50 years old, physician)

I was alone for a long time. Being away from people was psychologically challenging, but at the same time, it made me happy to know that they were safe. I prayed for this process to end as soon as possible. (P13, 50 years old, nurse)

I had mixed emotions of fear and happiness while doing this job. I was afraid, considering the risks involved, but at the same time, I felt a sense of happiness because we were able to help patients and make a difference in their lives. (P14, 44 years old, physician)

Challenges confronted (f = 33).

This theme was cited 33 times and reflected the challenges confronted by ICU staff during the COVID-19 pandemic in Turkey.

Personal protective equipment

When describing their challenges, ICU staff referred to the subtheme PPE 19 times.

The most difficult issue was getting used to PPE. Working conditions have become more difficult with it. Properly disinfecting or sterilizing reusable medical equipment was exhausting. I am exhausted physically. (P2, 28 years old, physician)

I used the PPE properly. When I saw that the use of equipment was sufficient during the process, I was a little relieved. (P5, 30 years old, nurse)

I couldn't get together with my family for 3 months. I felt so alone. I became addicted to the internet and TV. (P3, 39 years old, nurse)

With some of our teammates being quarantined, we had to work with colleagues who had no intensive care experience. This situation caused us physical and psychological exhaustion. (P11, 29 years old, nurse)

COVID-19 has made us feel worried and stressed, leading to a deterioration of family relations. Working with PPE has caused us to experience respiratory distress and nasal dryness. I became quite aggressive during periods when I lost fluids through sweating and decreased saturation. (P18, 30 years old, nurse)

Teamwork in the ICU

The anxiety level of my team was very high, so I struggled with these. (P5, 30 years old, nurse)

As a team, we quickly adapted to the pandemic. However, I observed negative effects of the pandemic both in myself and my teammates. Some of the negative effects we experienced included different types of communication errors, eating disorders, and sleep disorders. (P9, 28 years old, nurse)

I feared that I would be ostracized by my neighbors because I worked at the hospital. However, they were very supportive, on the contrary. As a team, we did not experience any difficulties. (P11, 29 years old, nurse)

People were hesitant to interact with me. Even my brothers distanced themselves from me. I was exhausted both physically and mentally. (P6, 23 years old, nurse)

During this process, we informed the relatives of the patients by phone. We were motivated by the good wishes of the patients' relatives to protect ourselves against the disease. (P14, 36 years old, nurse)

Work-related experiences

Occupationally, we follow the current guidelines published during the process. (P1, 25 years old, nurse)

Working during the COVID-19 pandemic has made me more practical, more experienced, and more pragmatic in a short time. I realized the importance of cleanliness and hygiene. (P2, 28 years old, physician)

It has been a pleasure to be at the forefront of this pandemic. I wish it had never happened. However, as in every difficulty, looking for something positive and being happy makes this situation more bearable for me. (P5, 30 years old, nurse)

I realized that I could overcome difficulties and should not be prejudiced. There are no unsolvable problems in life." (P8, 39 years old, nurse)

I think I went through a very difficult process and achieved success. (P10, 52 years old, physician)

I realized how important teamwork is. (P15, 32 years old, nurse)

Patient-related experiences

In general, I thought about the current situation of the patients, their helplessness, and loneliness. I thought that me or my relatives might be in the same situation and I was upset. (P1, 25 years old, nurse)

We had to intubate a conscious patient, and it was unfortunate that he was unaware of what was happening. (P4, 50 years old, physician)

I realized how difficult it is to be sick. I put myself in the patient's shoes and tried to understand what he was feeling. (P5, 30 years old, nurse)

Personal experiences

While some of the participants stated that they found ways to cope better with some issues such as stress, anxiety, and depression, they also stated that they had negative personal experiences such as insomnia and feelings of inadequacy.

I have been suffering from insomnia. (P13, 50 years old, nurse)

I had the opportunity to spend more time at home with my children and relax, but I had very stressful days in terms of COVID-19. (P12, 47 years old, health servant)

The pandemic process has fed my creative spirit. (P4, 50 years old, physician)

What doesn't kill us makes us stronger. (P17, 43 years old, nurse)

I have become more meticulous. (P2, 28 years old, physician)

I have finally learned to deal with fear. (P3, 39 years old, nurse)

It has personally developed me in many ways. Our team has learned what to do in a crisis. (P5, 30 years old, nurse)

My self-confidence has increased. I read more publications and review literature more often. I closely follow the strategies of countries in pandemic management. (P8, 39 years old, nurse)

I had family problems, and I thought of resigning. (P3, 39 years old, nurse)

Schools and kindergartens were closed due to COVID-19. Who takes care of my child when I go to work? Moreover, the long shifts and heavy workload have been affecting me both psychologically and physically. (P5, 30 years old, nurse)

I couldn't cope with it psychologically. I got depressed and lost a lot of weight in the first weeks, which decreased my body immunity. (P8, 39 years old, nurse)

I want to retire as soon as possible. However, retirement is not allowed due to pandemic management rules. (P12, 47 years old, health servant)

I had insomnia and started taking antidepressants. (P13, 50 years old, nurse)

There has been a significant increase in the suicidal rates, especially within the healthcare community. We hear about healthcare professionals committing suicide, and it deeply and personally affects us. We are not only fighting the deadly virus but also fighting within ourselves. (P14, 36 years old, nurse)

I am very tired and worn out. I can't handle another pandemic. I would like to change my unit or organization. (P15, 32 years old, nurse)

Expectations (f = 36)

Expectations from society

The participants mostly reported their expectations from society related to pandemic restrictions, social distancing, empathy towards healthcare professionals, and prevention of violence against healthcare professionals.

Public awareness related to COVID-19 and pandemic restrictions are essential to the prevention of the spread of deadly COVID-19 viruses. But seeing people without masks on the street makes me sad. (P4, 50 years old, physician)

The Minister of Health is making great efforts to manage the pandemic, but public awareness is low. Social awareness is low as well. Most people don't care if pandemic restrictions are violated. I think we will reach herd immunity by allowing COVID-19 to spread. (P2, 28 years old, physician)

Many people walk on the street without a mask or use it incorrectly. People who do not obey the COVID-19 rules should be punished. (P5, 30 years old, nurse)

I expect the public to obey the rules and show empathy to healthcare workers. I feel like I'm trying to get to an unknown destination with wasted shovels. I'm not sure if it's worth this effort. (P6, 23 years old, nurse)

As healthcare professionals, we isolate ourselves from our relatives and make sacrifices. Similarly, the public should be more sensitive to the rules. (P9, 28 years old, nurse)

People have come to realize the crucial importance of healthcare workers. I wish that this level of recognition and appreciation was always present. (P12, 47 years old, health servant)

It was depressing to see the streets crowded as I headed home tired after the night shift. At that moment, I couldn't help but question what I was fighting for. (P17, 43 years old, nurse)

Managerial issues

Under this theme, participants reported their complaints and expectations from hospital management. The excessive workload has had a detrimental impact on both the morale and performance of the team. (P6, 23 years old, nurse)

Nurses and healthcare workers have been among the most affected and vulnerable groups during the COVID-19 pandemic. To address this, the government implemented additional payment schemes for healthcare professionals. However, these payments have resulted in significant income inequality among health professionals, leading to dissatisfaction and unrest within the team. This is primarily due to physicians receiving higher payment amounts compared to other healthcare professionals. (P10, 52 years old, physician)

There is a need for more professional and well-planned working schedules to address the challenges faced by the team. It appears that managers have focused more on immediate problem-solving rather than taking a comprehensive approach. This approach is taking a toll on the team, leading to exhaustion and a sense of being consumed by the workload. (P6, 30 years old, nurse)

The process has affected the employees a lot. I wish they would give us what we deserve instead of trying to find the reward for our labor. But is it possible? (P11, 29 years old, nurse)

We have experienced the consequences of not being prepared for pandemics. The significant inequality in additional payments has caused the feeling of unworthiness. (P15, 32 years old, nurse)

In the media, it was portrayed as if only doctors were combating the pandemic. The feeling of being disregarded is painful for all of us, even though we are at a higher risk. (P16, 44 years old, nurse)

Discussion

The COVID-19 pandemic has had a significant impact on healthcare providers, particularly those working in the ICUs. The ICU staff have been on the front lines of the pandemic, caring for critically ill patients and facing many challenges. This study aimed to explore the initial experiences of the ICU staff during the COVID-19 pandemic in Turkey.

Healthcare providers and systems face additional challenges during pandemics. Work overload, insufficient human resources, and material inputs are among the issues that need to be addressed [18]. Because the successful management of the pandemic depends on providing adequate human and material resources [19]. The Covid-19 pandemic is a major threat to healthcare services all over the world. ICU staff described the early phases of the pandemic as a devastating period. Healthcare providers' experiences during prior epidemics of infectious diseases such as SARS, MERS-CoV, and Ebola were consistent with our findings [19-21]. ICU staff demonstrated great professional dedication and personal sacrifice in the face of COVID-19 to deal with the challenges.

The COVID-19 pandemic has left healthcare workers in a very uncertain situation.. This uncertainty leads to a sense desperation, a hopeless atmosphere, and decreased motivation among them. However in some studies, it has been found that the intensity of the feelings decreases over time [22]. On the other hand, some participants made statements that the process strengthened them both individually and collectively. As Seneca said, "Difficulties strengthen the mind, as labor does the body" [23].

Participants expressed their expectations from society and hospital management on various topics. They expect society to adapt to pandemic restrictions, show sensitivity to warnings and suggestions, and maintain social distancing. These expectations reflect the concerns of ICU staff regarding public health and their own well-being. It is crucial to maintain compliance with precautions like social distancing and wearing face masks, as they are widely recognized as effective in preventing the spread of the virus. However, the refusal of individuals to comply with these precautions at that time remain as a problem [24].

Particularly, nurse participants reported that despite their efforts, they were not visible, and their needs were ignored. As Yıldırım et al. [25] noted, nurses perceive an imbalance between their efforts and achievements. The ICN states that nurses' anger stems from the lack of preparedness and support they have received. To support Turkish nurses during this process, the Turkish Nurses Association (TNA) has

developed webinars, videos, links, and care algorithms. Meanwhile, TNA prepared a report on the problems faced by Turkish nurses and delivered it to the Turkish Ministry of Health [26].

Findings show that ICU staff often work in difficult and exhausting conditions. Moreover, as described by participants, the presence of inexperienced and limited ICU staff further increases their workload. In a recent study, Türkmen [11] particularly emphasizes the importance of having an adequate number of experienced healthcare workers. Consequently, all these experiences can lead to a decrease in the quality of healthcare services.

Conclusion

In this qualitative study, participants' responses revealed that working in an ICU during the COVID-19 pandemic was challenging and exhausting. To enhance preparedness for similar crises, it is recommended to implement improvements in ICUs based on research findings. This can include measures such as updating protocols, enhancing infection control practices, and ensuring adequate resources and equipment availability.

Fostering a nurturing environment is crucial for enhancing communication and teamwork among healthcare workers in ICUs. Hospital managers should prioritize creating a supportive culture where healthcare professionals feel comfortable expressing their concerns and thoughts. This can be achieved through open communication channels, regular team meetings, and the promotion of a culture of psychological safety.

Additionally, research findings highlight the importance of having sufficient equipment and qualified healthcare professionals in ICUs. Hospitals should ensure that ICUs are adequately equipped with the necessary medical devices, supplies, and technology to provide optimal care. Moreover, investing in training and professional development programs for ICU staff can help enhance their skills and expertise.

Besides, healthcare organizations should consider providing more generous additional payments to recognize the dedication and efforts of healthcare workers in ICUs. Offering financial incentives and rewards can help improve morale and job satisfaction, ultimately contributing to the overall quality of care provided in ICUs.

Lastly, addressing the consequences of the pandemic requires a multifaceted approach that encompasses not only healthcare system preparedness but also comprehensive public health strategies, effective communication, and community engagement. Comprehensive public health strategies are essential for limiting the transmission of the virus and minimizing its impact on society. These strategies encompass a range of interventions, including widespread testing, contact tracing, isolation and quarantine measures, and vaccination campaigns.

To gain a deeper understanding of the effects of the COVID-19 pandemic on healthcare providers, it is recommended to conduct further research. This can involve qualitative studies with different sample groups or quantitative studies with larger sample sizes. Such research efforts can shed more light on the experiences of healthcare providers and inform future interventions and support systems.

Limitations

The small sample size of this qualitative study may limit the generalizability of the findings to all ICU staff in Turkey or globally. However, the study's findings can still provide valuable insights and have implications for further research in this area.

The use of direct quotations from the participants helps support and validate the findings, adding credibility to the study. However, it is worth noting that the manual analysis approach employed in this study was laborious and time-consuming, which may have implications for the study's efficiency and scalability.

To enhance the generalizability of future studies, researchers should consider increasing the sample size and ensuring a more representative selection of participants. Additionally, using alternative analysis methods, such as computer-assisted qualitative data analysis, could help streamline the process and reduce the labor-intensive nature of the analysis.

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Conflict of interest disclosure

The authors declare no conflict of interest.

Ethics approval statement

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References

1. Ciotti M, Ciccozzi M, Terrinoni A, Jiang W-C, Wang C-B, et al. (2020) The COVID-19 pandemic. *Crit Rev Clin Lab Sci* 57: 365-388.
2. WHO (2020) Coronavirus disease 2019 situation report 51.
3. WHO (2023) Coronavirus disease pandemic.
4. OECD (2020) *Beyond Containment: Health systems responses to Covid-19 in the OECD*.
5. Uğraş Dikmen A, Kına HM, Özkan S, et al. (2020) Epidemiology of COVID-19: What we learn from pandemic. *Journal of Biotechnology and Strategic Health Research* 1: 29-36.
6. Cucinotta D, Vanelli M (2020) WHO declares COVID-19 a pandemic. *Acta Biomed* 91: 157-160.
7. Huang C, Wang Y, Li X, Ren L, Zhao J, et al. (2020) Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet* 395: 497-506.
8. Republic of Turkey Ministry of Health (2019) *Health Statistics Yearbook*.
9. *Health at a Glance: Europe* (2022) Health at a Glance: Europe 2022. OECD.
10. Kua J, Patel R, Nurmi E, Tian S, Gill H, et al (2021) HealthcareCOVID: A national cross-sectional observational study identifying risk factors for developing suspected or confirmed COVID-19 in UK healthcare workers. *PeerJ* 9: 1-20.
11. Türkmen E (2020) Organization of the ıntensive care units during COVID-19 outbreak. *Yoğun Bakım Hemşireliği Dergisi* 24: 39-45.
12. AlMekkawi M, El Khalil R (2020) New graduate nurses' readiness to practise: A narrative literature review. *Health Professions Education* 6: 304-316.

13. Credland N, Gerber K (2020) The BACCN and COVID: What have we learned?. *Nurs Crit Care* 25: 201-202.

14. Bengtsson M (2016) How to plan and perform a qualitative study using content analysis, *NursingPlus Open* 2: 8-14.

15. Coyne IT (1997) Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?. *J Adv Nurs* 26: 623-630.

16. Creswell JW (2009) *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

17. Tong A, Sainsbury P, Craig J (2007) Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care* 19: 349-357.

18. Ramos-Toescher AM, Tomaschewisk-Barlem JG, Barlem ELD, Castanheira JS, Toescher RL (2020) Mental health of nursing professionals during the COVID-19 pandemic: support resources. *Mental health of nursing* 24: 1-7.

19. Tan R, Yu T, Luo K, Teng F, Liu Y, et al. (2020) Experiences of clinical first-line nurses treating patients with COVID-19: A qualitative study. J Nurs Manag 28: 1381-1390.

20. Liu Q, Luo D, Haase JE, Guo Q, Wang XQ, et al. (2020) The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study. *Lancet Glob Health* 8: 790-798.

21. Lee JJ, Tsang WN, Yang SC, Kwok JYY, Lou VWQ, et al. (2021) Qualitative study of Chinese stroke caregivers' caregiving experience during the COVID-19 pandemic. *Stroke* 52: 1407-1414.

22. Karasu F, Öztürk Çopur E (2020) An ıntensive care nurse in the forefront of the epidemic while increasing cases of Covid-19: "HEROES IN FRONT-LINE." *Yoğun Bakım Hemşireliği Dergisi* 24: 11-14.

23. Sadykova AG, Yashina ME, Sharafieva AD (2014) Citation as a stimulus to boost students' communication skills at the English lessons. *English Language Teaching* 7: 12-25.

24. Mansdorf IJ (2020) *Enforcing compliance with COVID-19 pandemic restrictions: Psychological aspects of a national security threat*. Reliefweb 20.

25. Yıldırım N, Aydoğan A, Bulut M (2021) A qualitative study on the experiences of the first nurses assigned to COVID-19 units in Turkey. *J Nurs Manag* 29: 1-9.

26. Şenol Çelik S, Atlı Özbaş A Çelik, B, Karahan A, Bulut H, et al. (2020) COVID 19 pandemic process: Turkish Nurses Association. *J Educ Res Nurs* 17: 279-283.

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