



COVID-19 AGAINST HUMANITY: THE EXPERIENCES OF FRONTLINE NURSES AND PHYSICIANS WORKING IN COVID-19 WARDS

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ABSTRACT

Aims and objectives: This study aims to determine the experiences of Turkish nurses and physicians working in pandemic wards.

Background: Nurses and physicians play vital roles in the management of the pandemic. Their experiences and expectations need to be carefully considered, in order to handle the pandemic in a healthier way.

Methods: In-depth interviews were conducted with 22 participants (11 nurses and 11 physicians). Colaizzi's phenomenological method was used to qualitatively analyze the data.

Results: Four main themes emerged: 1) "It was the first but not the last," 2) "the earthquake effect," 3) "call for help," and, 4) "like a phoenix." Participants reported having experienced intense anxiety, concern, stress, and fear at the onset of the pandemic, as their working conditions and daily lives had been adversely affected. They tried to heal their patients in humane and sensitive ways despite fears of losing their loved ones and being infected, as well as conflicts within their teams. They also reported that they found meaning in their experiences, that their professional image has increased, and that they have developed spiritually throughout the process.

Conclusions: This study concludes that the pandemic has negatively affected nurses and physicians emotionally, physically, and psychologically, and that plans should be made to improve their working conditions and psychological support.

Keywords: pandemic, phenomenological study, nurse, physician

1. INTRODUCTION

The coronavirus disease 2019 (COVID-19), first reported in China in December 2019, is a respiratory disease caused by a novel coronavirus. COVID-19 pandemic spread rapidly across the globe and was declared a global pandemic. According to World Health Organization, as of 9 August 2021, there have been almost 202 million cases and 4.2 million deaths reported worldwide (1). Therefore, the health and safety of healthcare providers (HCPs) are very important not only for patient care but also for control of the outbreak (2).

During pandemic periods, the mental health of a society can be significantly affected as well as its physical health. HCPs in close contact with COVID-19 patients are more affected by this virus than society. They experience more mental health problems, such as stress, depression, anxiety, post-

traumatic stress disorder (PTSD), and burnout, than society (3, 4). These psychological problems can affect their attention, perception, and decision-making ability, which may, in turn, impair the management of infectious diseases (4). In addition, the fact that the aforementioned mental disorders continued in HCPs months and years after the Severe Acute Respiratory Syndrome (SARS) outbreak demonstrates that these acute effects of the pandemic can become chronic. As a result, the health system itself can be affected by these damages for a long time (5). Earlier outbreaks, such as the Middle East Respiratory Syndrome-coronavirus (MERS-CoV), highlighted the need to analyze the needs and experience of HCPs when establishing a healthcare system that can effectively respond to outbreaks (4). The Centers for Disease Control and Prevention (CDC) also highlighted the importance of listening to and learning from

Table 1. Interview guide

<p>Main question: Can you tell me about your first care or treatments experience working at COVID-19 wards?</p> <p>Main question: Can you tell me about the impact of the COVID-19 pandemic on your lives?</p> <p>Main question: Can you tell me about your expectations during the pandemic process?</p> <p>Main question: What is the meaning of the COVID-19 pandemic for you?</p> <p>Main question: If you could compare COVID-19 pandemic to something, what would it be?</p>

healthcare practitioners' experiences in battling COVID-19 pandemic(6). This study aims to determine the experiences of Turkish HCPs working in pandemic wards.

2. METHOD

2.1. Design

The present study uses Colaizzi's phenomenological method to qualitatively analyze the experiences of frontline HCPs in COVID-19 pandemic (7). Colaizzi's phenomenological method is relies on Husserlian philosophical phenomenology as its epistemic foundation. In this method, researchers aim at discovering and describing the essential meanings of people's lived experiences (8). Also, this scientific approach guarantees the authenticity of the collected experience of participants to adhere to scientific standards. The approach is suitable for ascertaining Turkish nurses and physicians' experiences working in COVID-19 pandemic units, which involved complex phenomena. The recommendations of the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was followed (9) (Supplementary file 1).

2.2. Participants and settings

Purposive and snowball sampling were used to recruit participants. Eligible participants were physicians or nurses, aged ≥ 18 years and Turkish-speaking, who were recruited from their original departments to provide patients with COVID-19 pandemic with direct care and treatment. The sample size was determined by the data saturation—i.e., at the point where no new themes from participants' experiences emerged. Fourteen participants were already known by one of the researchers (MK) and the others were approached by snowball sampling. During the interviews with the HCPs they known by researchers, they were asked about the colleagues they could recommend. HCPs who agreed to participate in the study and provided diversity characteristics were included in the sample. To achieve diversity in the experience of caring for patients with COVID-19, differences in

years of work experience, specialty, number of support days, and hospital jobs were considered.

The present study was conducted at a research and training hospital in the Mediterranean Region of Turkey. This hospital has eight pandemic units and three intensive care units that were converted from different specialty units. Every shift was managed by two nurses, each of which was responsible for eight patients. Also, one medical specialist and assistant worked in one pandemic unit. During the data-gathering period, every pandemic unit had an average of 16-20 patients.

2.3. Data collection

The data were collected through one-time, semi-structured in-person interviews in June-August 2020. Each interview was conducted by the second and third author and held in a special room during the break times of healthcare professionals, taking security measures with personal protective equipment. Before the start of the study, the participants and the interviewers did not know each other. Each interview lasted 25-50 minutes, was audio-recorded, and followed a semi-structured format that centered on the participant's perceptions and emotions (Table 1). Interviews were conducted by PhD-prepared nurse researchers with expertise in qualitative methods. The researchers used open-ended questions, practiced active listening, and allowed participants to speak openly during the interviews to promote conversation. The data collection continued until data saturation was reached, indicating that no new information was gained. Interviews were subsequently transcribed verbatim by three authors.

2.4. Ethical Consideration

All participants were notified about the aim of the study and the purpose of the interviews. Also, all written permissions were given by participants. Ethical approval was obtained from the committee of the university hospital where the study was conducted (Approval Number: 2020/221).

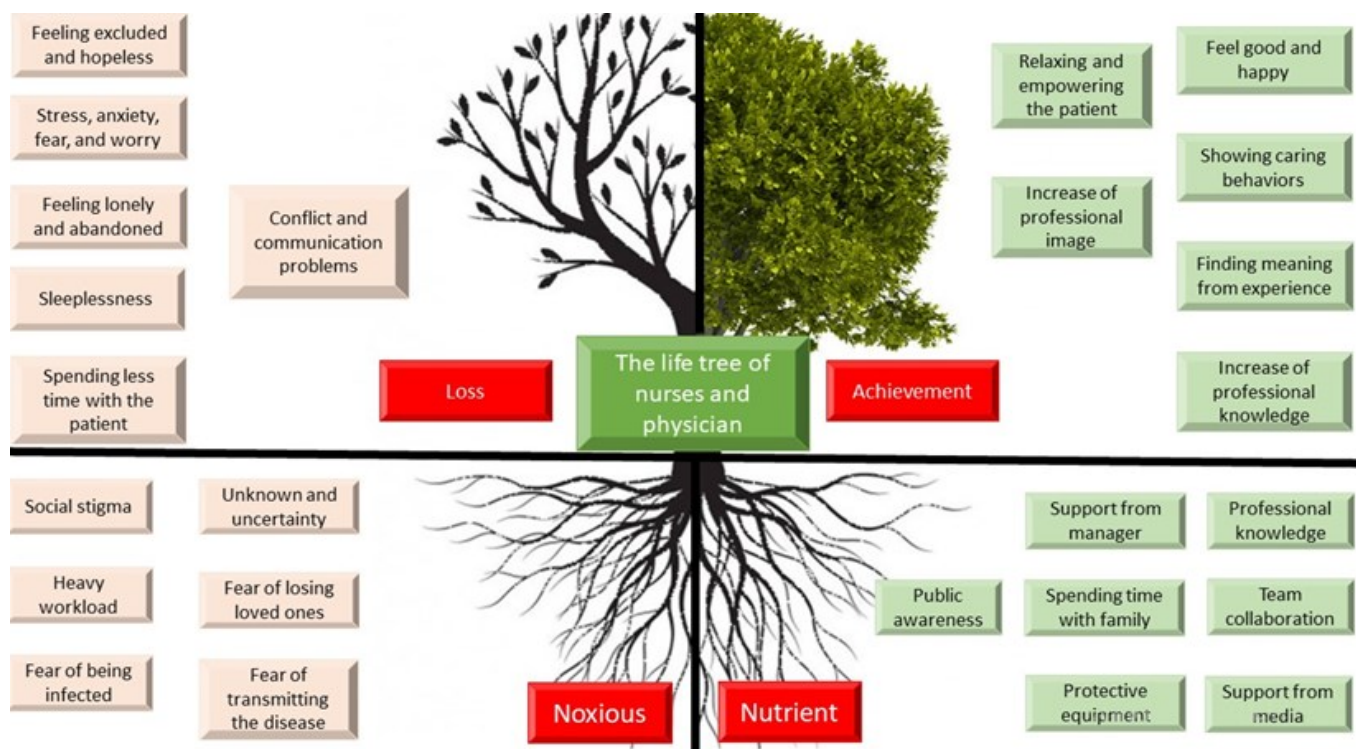


Figure 1. The life tree of nurses and physician

2.5. Data Analysis

The data obtained from the participants through in-depth interviews was analyzed by the researchers, who read the transcripts separately and repeatedly. Colaizzi's phenomenological analysis method included identifying significant statements as themes and formulating meanings. These meanings are expressed in text, and findings are visualized with direct quotes. A study group was composed of three Masters in Nursing and a Doctor of Nursing.

2.6. Rigor

The dimensions presented in the Trustworthiness, Auditability, Credibility, and Transferability (TACT) framework were used in this study (10). The definition of 'trustworthiness' represents qualitative research quality and underpins both rigor in the research process and significance, as well as faith in the research outcome. Reflexivity was used to achieve trustworthiness, which means avoiding biases regarding researchers' experience with the phenomenon of interest. In this study, the systematic approach recommended by Creswell and Miller (2000) is used to achieve trustworthiness (11). Participant validation is applied to render auditability. Credibility was achieved by integrating the most representative categories from the data. Interviews were verbatim transcribed and interpreted as a quotation. All authors thoroughly analyzed the data and took part in the entire study analysis process. The findings were presented to

COVID-19-designated hospital four nurses and physicians who did not participate in the study to affirm their agreement with the derived results, in order to affirm transferability. A mixture of purposive and theoretical sampling maintained content validity by encouraging participants to speak openly during interviews and share thorough explanations of their experiences. The present study reflects the experiences of frontline nurses and physicians working COVID-19 pandemic in middle-income countries.

3. RESULTS

The study was conducted with 22 participants (11 nurses and 11 physicians). 17 of the participants were female and 5 were male. The mean age of the participants was 34.27 ± 6.97 . The work experience of participants was 10.40 ± 7.07 years. The length of the pandemic clinical experience of the participants ranged from 3 months to 5 months (Table 2). Four main themes emerged from the data: "It was the first but not the last," "earthquake effect," "call for help," and, "like a phoenix." The data in the study were schematized by the researchers, as shown in Figure 1. Participants created 21 metaphors (Table 2).

3.1. Theme 1. It was the first but not the last

This main theme included the first patient care and treatment experiences of nurses and physicians. The findings were transferred in terms of the participants' feelings, thoughts, and their attitudes toward the patient.

Table 2. Characteristics of the participants

Participant No.	Age	Designation	Gender	Qualification	Years in Designation	Time of COVID-19 pandemic service	Metaphor
P1	32	Physician	Male	Bachelor degree	6	4 months	Toilet siphon
P2	27	Physician	Female	Bachelor degree	2	4 months	Haplessness
P3	38	Physician	Female	Bachelor degree	12	4 months	The film "Epidemic"
P4	43	Physician	Female	Bachelor degree	20	4 months	Handcuffs
P5	32	Physician	Male	Bachelor degree	7	4 months	Dystopia
P6	29	Physician	Female	Bachelor degree	4	4 months	Shithole
P7	39	Physician	Female	Bachelor degree	11	4 months	Horror or thriller film
P8	38	Physician	Female	Bachelor degree	14	4 months	Natural disaster
P9	30	Physician	Male	Bachelor degree	5	4 months	Nightmare
P10	34	Physician	Female	Bachelor degree	8	5 months	Horror film
P11	34	Physician	Male	Bachelor degree	8	5 months	Masquerade ball
P12	21	Nurse	Female	High school graduate	1	3 months	Soldier
P13	25	Nurse	Female	Bachelor degree	5	3 months	Healthcare workers are captains, patients are ships
P14	37	Nurse	Female	Bachelor degree	18	4 months	Monster
P15	24	Nurse	Female	Bachelor degree	2	4 months	Convict
P16	40	Nurse	Female	Bachelor degree	15	4 months	War
P17	40	Nurse	Male	Bachelor degree	13	4 months	Prewar panic
P18	47	Nurse	Female	High school graduate	25	3 months	Shock and punishment
P19	39	Nurse	Female	Bachelor degree	22	3 months	Science fiction movie, the nuclear bomb
P20	42	Nurse	Female	Bachelor degree	17	3 months	Horror movie
P21	38	Nurse	Female	Bachelor degree	13	3 months	Fight the ghost
P22	25	Nurse	Female	Bachelor degree	1	4 months	Nothing

Subtheme 1. The first time is never forgotten

Most of the participants stated that they experienced intense anxiety, fear, stress, and panic in the first patient care and treatment due to pronounced uncertainty.

'When the first patient arrival at the clinic, I was very worried. I was crying while going to the patient's room. I peed out of fear. I will never forget that moment'. (Nurse 3)

'When the first case was detected, I was panicked. There were many uncertainties. At that time, we stressed seriously'. (Physician 4)

'I wondered if I would be able to prevent transmission, protect the patient and myself. I was excited and panicked as if I had just started my profession'. (Nurse 4)

Subtheme 2. The struggle with despair

Some of the participants expressed that they tried to relax and calm the patient because they were anxious, despaired, and fearful.

'Patients were uneasy when they saw us with protective equipment and cried. We tried to calm them. They were relieved when they made a statement'. (Nurse 7)

'The prognosis of the patients was serious and they despaired. I was sad, worried, and despaired. I saw that these patients needed us and tried to comfort and cure them'. (Physician 9)

Subtheme 3. Barriers to caring language

Most of the nurses affirmed that they wanted to comfort and empower the patient but had obstacles due to the fear of being infected and protective equipment.

'I work quietly, without speaking, and leave the patient's room as soon as possible. I give short answers to the questions due to the afraid of being infected'. (Nurse 9)

'The patient cannot see your smile due to the protective equipment. I tried to show that I cared about them as much as possible by asking their families. I narrow my eyes more so they can understand I'm smiling'. (Nurse 1)

'I understand the patient's helplessness. I always contact the patient, but there are obstacles between us'. (Nurse 8)

3.2. Theme 2. Earthquake effect

This main theme included the adverse effects of the pandemic on participants' personal and professional

lives.

Subtheme 1. Worries about loved ones

Most of the participants reported that they had a fear of transmitting the disease to loved ones and losing them.

'I have never worried about myself. I was worried about my children and dogs'. (Physician 7)

'A father and daughter were hospitalized in adjacent rooms. The daughter could not meet with her father and cried in case something happened to her father. At that moment, I feared losing my loved ones'. (Nurse 1)

Subtheme 2. Social stigma

Some of the participants stated that people treat HCPs like virus carriers, making them feel excluded.

'Many people hesitate to contact us and are afraid of us. I feel like a plague-stricken'. (Nurse 8)

'The most difficult years of my professional life. You have to examine and treat patients that no one wants to touch'. (Physician 11)

Subtheme 3. The heavy burden of working in the pandemic clinic

Most of the participants said that working conditions were extremely challenging and that this situation negatively affected them physiologically and psychologically.

'My shift count increased suddenly. I started sleeping one day at the hospital and one day at home. I forgot about normal life'. (Physician 4)

'We have a heavy workload. There is stress due to this responsibility. When you put your head on the pillow, you cannot sleep due to anger'. (Physician 5)

Subtheme 4. Intra-team conflict

Most of the participants mentioned difficulties with trying to adapt to new teams, rules, and procedures. They specified that conflicts and communication problems within teams increased due to fear of being infected and unfamiliar conditions.

'Everyone had difficulties with each other regarding the sharing of tasks. Nobody wants to spend too much time in the patient room'. (Physician 4)

'Too much contact with the patient increases the risk of contamination. Everyone wants to work quickly and leave as soon as possible while in the patient room. Extra orders cause reactions'. (Physician 11)

Subtheme 5. There is no end in sight

Most of the participants affirmed that they felt hopeless due to the prolongation of the pandemic and unknown the ending time.

'How long it will last? It is indeed uncertainty that drains people's energy and power'. (Nurse 8)

'I feel like this situation will never improve and end. We will always stay here. I have no hope at all'. (Nurse 10)

'I feel like I'm both living and watching the movie right now. I don't think this movie will end'. (Physician 3)

3.3. Theme 3. Call for help

This main theme included the expectations of the participants from media, managers, and colleagues.

Subtheme 1. Being more visible

Some of the participants emphasized that they expected to help the media and the manager to become more empowered and increase public awareness.

'More time and opportunity may be given to us to be more visible on television, radio, or social media. Better projects and programs could be made to raise awareness of the community'. (Nurse 2)

'Patients expect to help. Who will help us? We need to be supported by specialists physically, mentally, and psychologically'. (Nurse 8)

Subtheme 2. The feeling of being alone

Most physicians expressed that they felt lonely and abandoned and expected to support colleagues working in different departments.

We feel like we're stranded and walking alone. We walk on the front line with this responsibility'. (Physician 1)

'We could not get any support from our colleagues in the other department. Other departments should take responsibility. I don't know what to do if this process takes a long time'. (Physician 2)

3.4. Theme 4. Like a phoenix

This main theme included positive effects of the pandemic on participants' personal and professional lives. These findings were conveyed in line with the positive effects in the 4 months after the onset of the pandemic.

Subtheme 1. Withdrawing into the family's shell

Some of the participants specified that they spend more time with their family and feel good.

'We spent more time with our family. My sharing and communication with my family have increased. It was the best part of this process'. (Nurse 10)

'I spent more time with my family. I had never felt that close. I understood the value of my family and feel happy'. (Physician 7)

Subtheme 2. We are all a link in the chain

Most of the participants emphasized that everyone supported and empowered each other and worked devotedly.

'We are like a family. Everyone nurtures each other. We are united by the universal language of love and benevolence'. (Nurse 8)

'Everyone works devotedly. We tackle the challenges together. We have no choice but to support and empower each other'. (Physician 10)

Subtheme 3. Being visible with the power of the profession

Most of the participants emphasized that their professional image and knowledge have increased during the pandemic, and that they feel empowered.

'My profession and knowledge empowered me. Our profession is called a sacred science, but I felt it in this process'. (Nurse 7)

'Society realized our professional value. Our professional image increased in this process'. (Physician 3)

'I have professional achievements. It is a big thing for an infectious diseases physician to manage a pandemic disease'. (Physician 1)

Subtheme 4. Finding meaning in the middle of the fire

Some of the nurses stated that they found meaning from their experiences and grew spiritually.

'I felt that I am close to God when I fear death. I read the Quran and felt spiritual support'. (Nurse 7)

'This process strengthened our spirituality. We saw how weak we are in the face of the Creator and that life is not sincere to us'. (Nurse 9)

'This process taught me to be powerful and cooler. I learned that change may be beautiful and meaningful that I learned'. (Nurse 3)

'I learned dedication and team spirit. Now I have a different perspective'. (Physician 6)

4. DISCUSSION

In this study, most of the participants stated that they experienced intense fear, anxiety, concern, and stress at the onset of the pandemic. They stated that the most important concerns were losing their loved ones and being infected. Other studies have likewise found that many HCPs have experienced tremendous levels of fear, anxiety, stress, hopelessness, helplessness, depression, distress, and PTSDs due to similar reasons while providing care for COVID-19 pandemic patients (12-14). In a study, it was found that frontline HCPs were twice as likely to suffer anxiety and depression than others (15). Also, in previous outbreaks such as SARS, MERS-CoV, and EBOLA, the HCPs experienced anxiety, depression, exhaustion, and PTSD (4, 16-18). Many reasons were reported, including the uncertainty about the nature of the disease, high transmission rates, the contagious nature of the virus, close contact with patients, severe emergencies, insufficient support and preparation, limited opportunities for training, and unclear roles (12, 13, 19-22). Considering all these determinants, the emotional and psychological burden experienced by HCPs is an expected result.

Participants expressed that they wanted to enter the patients' rooms as little as possible and try to adapt to new team, rules, and procedures. They specified that they had extremely challenging working conditions. They also attributed concerns to the uncertainty of the pandemic as well as the lack of knowledge and experience regarding the new procedures. It was shown that the HCPs who provide care for COVID-19 pandemic patients have a heavy workload that includes comprehensive assessment, close monitoring, and using personal protective equipment. It is also reported that HCPs are exposed to an increasing number of serious cases, deaths, and unfamiliar conditions (12, 19, 21, 22). As a result, HCPs experience intense burnout, exhaustion, emotional stress, and feelings of being overwhelmed due to heavy workloads, adaptation processes, and unfamiliar conditions (12, 20, 22, 23). As a matter of fact, participants in this study stated that they were adversely affected, both physically and psychologically, and experienced conflicts and communication problems within the team. In particular, the reason for the exhaustion of health workers during the pandemic may be the increased workload and the hopelessness and helplessness due to the unknown. HCPs stated that they expect support from managers, colleagues, and society.

Healthcare organizations and society have a

responsibility to help address these stresses and challenges encountered by HCPs (24). It is necessary to provide a safe working environment, continuous education, as well as physical, emotional, physiological, and social support (19, 25-27). It was shown that anger, frustration, anxiety, and stress increased when HCPs felt they received poor support from their organization (26, 27). HCPs reported that the availability of mental health and well-being resources had a positive impact on their COVID management effectiveness (20, 28). In this context, it is extremely important to support HCPs and to make individualized interventions for them.

The participants stated that despite all the challenges, they tried to comfort the patients, reduce their anxiety, and heal them. Similar to these findings, it was found that HCPs made an effort to empathize, and to comfort and relieve patients' burdens while providing care for COVID-19 pandemic (13, 19, 22). These attitudes of HCPs may be related to the sense of responsibility and professional values. HCPs have stated that it is their enduring responsibility to care for these patients (16). It was found that they did not complain about working on the front lines and exhibited strong professional responsibility (22). Moreover, the professional values of HCPs affect both the caring outcomes and responses to patients' needs (29). The HCPs who have high professional values are more sensitive about their roles and exhibited humane attitudes (30). As a matter of fact, in this study, the statements of the participants about the protection of society in the prevention of the disease confirm these results.

The participants stated that they found meaning in this process, realized the importance of family and life, felt the team spirit, developed professionally, and grew spiritually. Similarly, in the studies, HCPs reported that they experienced a sense of solidarity and collaboration never felt before and found a spirit of learning and fighting together (23, 28, 31). In crisis situations, the human questions their existence and use all their possibilities for recovery and regrowth. Considering the statements of HCPs, it is thought that they are experiencing posttraumatic growth (PTG).

PTG is defined as "positive psychological changes experienced as a result of the struggle with traumatic or highly challenging life circumstances." The growth tends to be unplanned and unexpected and causes transformative changes. People develop new ways of thinking, feeling, and behaving (32). PTG occurs in five domains: appreciation of life,

personal strength, new opportunities, relating with others, and spiritual change (33). Given this definition, we may say that HCPs in this study experienced PTG.

4.1. Strengths and limitations

There are some limitations and strengths attributable to this study. First, the study was conducted at a single hospital. Second, the findings of this study may not be generalizable to healthcare professionals who work in different institutions and have different experiences, difficulties, and achievements. However, this study is one of very few qualitative studies on the experiences of nurses and physicians working in COVID-19 pandemic clinics of middle-income countries. The education level, the professional experience, and the age of the participants provided different perspectives and responses.

5. CONCLUSION

Participants have experienced intense negative emotions due to uncertainty at the onset of the pandemic. The intra-team conflicts have been reported due to working within new teams, adjusting to new practices, and enduring heavy workloads. Participants hope for solutions that will increase the awareness of society and reduce their workload. Although the participants were negatively affected, they stated that they found meaning in this process and had some achievements. Recognizing the importance of family, increase in professional image, feeling team spirit, and spiritual growth was emphasized as important achievements.

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