Being a Nurse During a Worldwide Pandemic: A Qualitative Study Exploring Nurses' Perceived Challenges and Expectations During the COVID-19 Pandemic in Turkey

Original Research

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Abstract

Background: Determining the health-care experiences, problems, and difficulties of nurses during a pandemic is important to shape the measures of nursing care management. This study aimed to better understand clinical nurses' challenges and expectations surrounding coronavirus disease 2019 (COVID-19) pandemic.

Methods: A qualitative study with semi-structured interviews was conducted. The study sampling comprised of 48 clinical nurses who have worked in pandemic hospitals. Interviews were recorded, transcribed, and evaluated based on the content analysis method.

Results: In this study, 6 main themes were determined as intrapersonal, interpersonal, institutional/organizational, community, policies and system challenges, and expectations. Based on the results, nurses' perceived challenges were psychological distress, dilemma, safety and security issues, workload increased, disruption in family and social relationships, stigmatization encountered, and not making their voices heard enough due to the lack of nurses in the scientific advisory board. Nurses' expectations were determined as improvement of their personal rights and institutional psychosocial support.

Discussion: The results of this study can be used as a guide for action plans to support nurses, develop health-care protocols for safe patient care, and create family and pandemic support systems.

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Coronavirus disease 2019 (COVID-19) has been defined as a pandemic by the World Health Organization and has spread in a short period of time since its occurrence in Wuhan, China.[1,2] As of December 31, 2020, the information-centric networking (ICN) data set reveals that more than 1.6 million health-care workers have been infected in 34 countries. The cumulative number of reported COVID-19 deaths in nurses in 59 countries is 2262.[3] In different countries of the world, in addition to the increased work stress with insufficient personal protective equipment (PPE), nurses have been faced with physical and psychological stress related to lack of knowledge about the disease, anxiety of transmission, and increased workload.[4–7] Moreover, extreme incidents had occurred, such as suicide of nurses caring for critically ill patients in Italy.[8]

The first positive COVID-19 case in Turkey was detected on March 10, 2020,[9] and the pandemic has deeply affected Turkey.[10] During the management of the pandemic, a scientific committee was formed; pandemic hospitals were selected in each province; a flexible job rotation system was introduced to public personnel other than health personnel; curfew was applied to at risk groups; and a stay-at-home approach had been adopted.[11] The increased workload, self-isolation, and stay-at-home quarantine approaches have brought various changes in the workplace, family, and social life of health-care professionals.[10,11]

By taking the socio-ecological approach, this study aimed to understand factors affecting individual, multi-level social factors, and systems during the fight against COVID-19 to account for determinants affecting nurses' perceived difficulties. In 1970, social ecological model (SEM) is rooted in ecological theory that was proposed by the American psychologist, Urie Bronfenbrenner. SEM provides a framework for evaluating numerous and mutual effects of social elements grates various levels that affect health to show a clear and full picture of factors influencing health. These factors include individual, interpersonal, social environment, physical environment, and public policies.[12,13] This framework can afford the ability to think, design, and implement effective interventions against barriers to quality health care during pandemics. Understanding how multi-level social factors and systems not only produce challenges but also sustaining them is imperative and important to shape the measures to be taken in the management of the said pandemic process and to strengthen the nurses.[14,15] Although there are studies dealing with the experiences of nurses related to the subject,[16,17] no study was found that

addresses their perceived difficulties in Turkey. The aim of this study was to better understand clinical nurses' challenges and expectations surrounding the COVID-19 pandemic.

Methods

Study Design

A qualitative study was conducted with semi-structured interviews between August and October 2020. A phenomenological perspective was used to attach importance to rich contextualized descriptions based on experience.[18] The consolidated criteria for reporting qualitative research was followed in this study.[19]

Sampling and Participants

The population of this study was clinical nurses working with patients with COVID-19 in pandemic hospitals (hospitals with at least 2 of the following: infectious diseases and clinical microbiology, chest diseases, internal medicine specialists, and a third level adult intensive care unit). The inclusion criteria were clinical nurses agreeing to participate in this study, have had more than 1 mo of experience in caring for patients with COVID-19, and self-reported as not having been infected with COVID-19. A snowball sampling method was used to determine the population.[20] When similar concepts and expressions started to be repeated, it was assumed that data saturation was reached, and sampling was stopped. Thus, the study sampling comprised of 48 nurses who have worked in pandemic hospitals at different regions in Turkey.

Data Collection

Data were collected by means of sociodemographic characteristics form and a semi-structured interview form prepared by researchers (Table 1). Interview questions were used based on 5-level of SEM to better understand the challenges that consider the complex interplay between intrapersonal, interpersonal, organizational/institutional, community, policies and system factors, and expectations.

As the pandemic continued, high transmission risk of COVID-19 was prevalent, interviews were conducted through an online program by an in-depth and one on one interview method. Lincoln and Guba's framework were used to ensure the trustworthiness and rigor of the study: credibility, transferability, dependability, and confirmability.[21] The researcher (D. Evgin, Ph.D., RN) personally participated in data collection to prevent differences in data collection methods caused by the involvement of multiple leaders; thus, biases in data collected were prevented. At the completion of each interview, the researcher restated or summarized the responses provided by the participants and asked to confirm the accuracy of the record. The interviews lasted between 20 and 40 min and all interviews were audio-recorded.

Data Analysis

Sociodemographic characteristics of nurses were evaluated using descriptive statistical analyses. IBM SPSS Statistics 22.0 (IBM Corp., Armonk, New York, ABD) packaged software was used for the evaluation of the descriptive data.

Qualitative data were analyzed based on SEM by using thematic content analysis, which includes 6 phases.[22] The initial data obtained from semi-structured interviews were transcribed verbatim within 24-48 h after the interview. Whereas, the

Table 1. Semi-structured interview form questions

Questions
1. What have you felt during the pandemic process? Could you elaborate on your feelings?
2. What have you experienced in caring for COVID-19 positive patients? Could you please explain your experiences?
3. Do you experience any challenges while caring for COVID-19 patients? Could you elaborate?
4. What challenges have you experienced during the pandemic regarding your family? Could you elaborate?
5. Have you experienced any problems/challenges at the social level during the pandemic process? Could you elaborate?
6. As a nurse, what are the professional problems you want to be solved first during the pandemic? Could you elaborate?
7. Can you explain your expectations about policies or practices related to your profession during the COVID 19 pandemic?

documentation of the data was conducted by 1 of the researchers, and the content analysis was performed by 2 of the researchers. Two experts (both with PhD and RN degrees) separately had read each interview transcript line by line and then the analysis of the data code. Then the sub-themes were decided by comparing the coding. In the second reading of the transcripts, the researchers gradually detected associations between the themes and sub-themes, related to context and content. The researchers then reviewed the larger themes; 6 main themes were determined. Finally, themes and sub-themes were reported (see Figure 1).

Ethical Aspect of the Study

Before beginning the study, the approval of the Scientific Research Board of the Ministry of Health and the ethical aproval by the clinical research ethics commitee from the universty was granted. Written and additionally verbal consent was obtained from participants. Confidentiality was maintained by using numbers to replace names of the participating nurses (eg, nurse N1, N2).

Results

Findings Regarding Descriptive Characteristics

The descriptive characteristics of participants are shown in Table 2.

Findings Regarding the Semi-Structured Interviews

In this section, findings under themes and sub-themes given accompanied by nurses' statements are presented below and in Table 3.

Theme 1: Intrapersonal Challenges

Sub-Theme 1: Psychological Distress

Almost all nurses reported challenges to cope with the psychological distress related to inexperience, lack of knowledge, fear of getting infected with COVID-19, fear of death, and difficulties of working with protective overalls (Table 3).

"I am inexperienced. I had a hard time keeping myself from crying, and frankly, at a time like this, when our morale and motivation should be high, I was incredibly stressed and suppressed so much that I had cold sores in my mouth. I had an aphtha in my mouth from stress. Unfortunately, we were stressed during the period when we should have been the most distant. Frankly, I had such a difficult time. I felt stress and fear of the unknown." (N4)
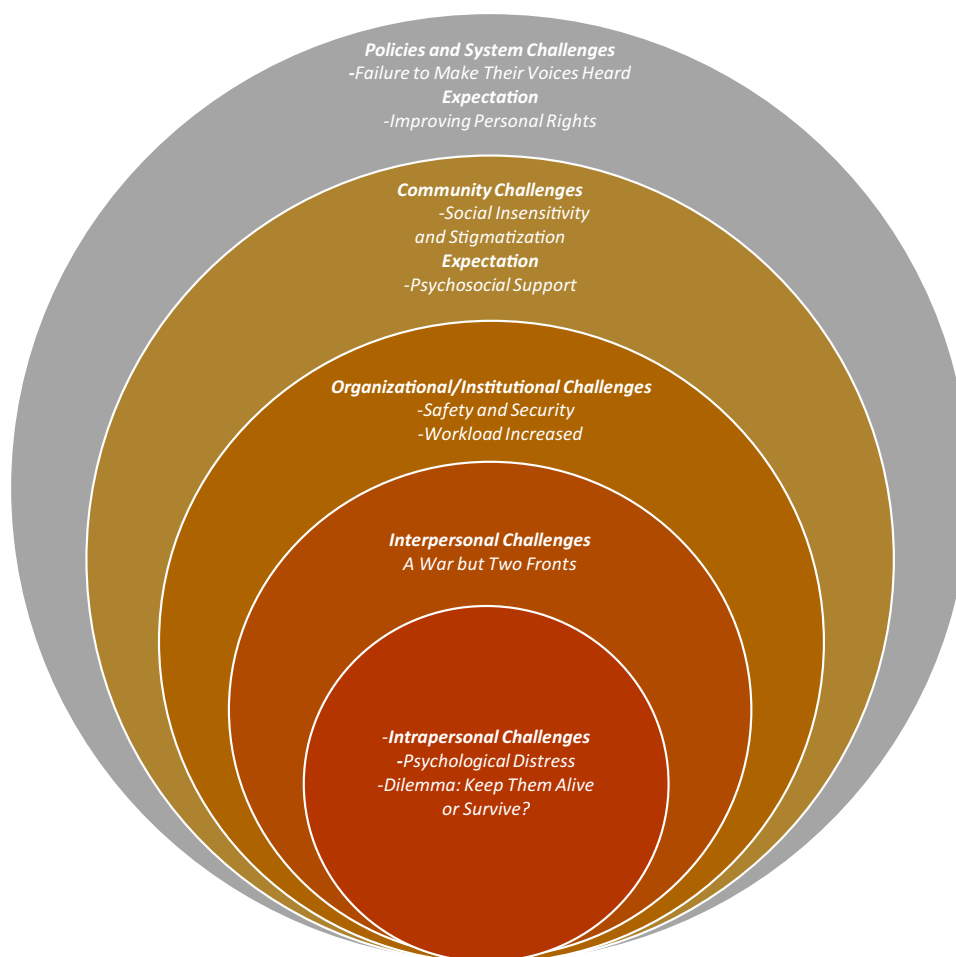
Figure 1. Social-ccological model for understanding challenges perceived by nurses and expectations. Adapted from McLeroy KR et al.[12].

Sub-Theme 2: Dilemma: Keep Them Alive or Survive?

Almost all the respondents stated that they were not only worried about getting infected but also scared of transmitting the infection to others during the care process. It was determined that nurses experienced fear and anxiety in providing infection control and ensuring their own safety during the pandemic period (Table 3).

"In the service . . . the patients frequently coughed, sneezed, and spit. It was difficult for us to protect ourselves from this. CPAP treatment increases the number of viruses while breathing and makes it easier to pass them into the air that we breathe. Thus, virus exposure time increases. In the care of intubated patients . . . we needed to provide regular aspiration. . . . this is what I am most afraid of because splashing occurs frequently when using an aspiration cannula. I can be infected or transmitting the infection to another." (N43)

Theme 2: Interpersonal Challenges

Interpersonal challenges experienced by nurses during pandemic was determined under a sub-theme *"a war but 2 fronts."*

Sub-Theme 1: A War But 2 Fronts

Nurses experienced difficulties with communications and activities with their families during the pandemic such as restricted communications with families and relatives, restricted family visits and interactions, feeling of anxiety, fear of transmitting the virus to their families, difficulties in caring for their children, and doing some domestic responsibilities. The current study determined that some health workers preferred to remain separated from their homes and families, that they communicated with their family members without physical contact and generally by phone. Samples of the nurses' opinions on these topics are given in Table 3.

Theme 3: Organizational/Institutional Challenges

Sub-Theme 1: Workload Increased

Most of the nurses reported that they experienced long and difficult working hours especially with the use of PPE. They had to take care of more patients because there was a lack of the number of nurses. Nearly half of the nurses reported that, due to the pandemic, they had to work in areas other than their specialized field where they had no experience. They found it difficult to manage the nursing process while caring for newborns, children, intubated, and unconscious patients suspected or definitive COVID-19 diagnosis; they found it difficult to carry out invasive procedures such as vascular access, and other treatment and care applications with the use of PPE. A loss of time, disrupted and prolonged tasks, and difficulty executing normally easy tasks were reported due to the lack of COVID-19 information and long working hours. Breathing difficulties, sweating, fatigue, and movement limitations were also experienced due to the use of PPE (Table 3).

Table 2. Descriptive characteristics of the nurses

Descriptive characteristics	Number	%
Age (y)		
20-24	16	33.3
25-29	12	25.0
30-34	12	25.0
35 and over	8	16.7
Gender		
Female	43	86.6
Male	5	10.4
Educational status		
High school graduate	8	16.7
Bachelor's degree	28	58.3
Master's degree	12	25.0
Income status		
Income is less than expenses	4	8.3
Income matches expenses	32	66.7
Income is more than expenses	12	25.0
Working years		
Less than 1	10	20.8
1-5	9	18.8
6-10	15	31.2
11-15	9	18.8
16 and longer	5	10.4
Did you choose the profession voluntarily?		
Yes	40	83.3
No	8	16.7
Total	48	100.0

"*Caring for pediatric patients with suspected or definitive COVID diagnosis . . . is riskier and requires even more attention because the hospitalization creates stress and fear for the child and family . . . and entering the child's room with protective equipment increased their fear against nurses. Accordingly, I experienced difficulties in follow-up, invasive procedures, treatment, and all care practices . . . children and their parents were very agitated, nervous, and insecure. . . . These situations added to our individual anxieties caused me to struggle in managing the nursing process.*" (N35)

Sub-Theme 2: Safety and Security

Most of the nurses reported that they felt unconfident during the COVID-19 pandemic. Nurses reported that they have difficulty in ensuring their own safety due to factors such as insufficient or lack of PPE, not tested in situations with exposed risk of infection, negligence in emergencies, poor physical structure of the hospital, and the complex work system. Most nurses observed that patient's relatives neglect to observe social distancing (Table 3).

"*I didn't feel safe professionally. At the beginning of the pandemic, there was a lack of protective equipment, including protective overalls. This led to insecurity, fear, and anxiety.*" (N11)

Theme-4: Community Challenges

Sub-Theme 1: Social Insensitivity – Stigmatization

Nurses had difficulty in infection control due to the lack of conscious social behavior: health workers have been subjected to violence, they experienced difficulties when using public transportation, and they were exposed to exclusion and stigmatization because they are seen as a source of contamination (Table 3).

"*I had a lot of problems during the pandemic. . . . because we work at the hospital the people around us . . . treat us like we have the virus. Also, transportation was a big issue because we also worked on the days when the curfew was enforced and it was hard to find busses, minibuses, or the metro . . .* " (N26)

Theme 5: Policies and System Challenges

Sub-Theme 1: Failure to Make Their Voices Heard

Nurses think that their efforts toward their profession do not seem enough although they are the professional group that is most accountable during this period. Nearly half of the participating nurses ($n = 20$) stated that there should be a nurse representative in the Coronavirus Scientific Advisory Board so that they can benefit from the knowledge and experience of the policies to be developed for the pandemic, and make their voices heard. One-third of the participating nurses pointed out that individual nurses should be appointed as a consultant, trainer, and defender roles in the management of the pandemic, and that nurses should play a role in developing policies toward improving professional and personal rights. Samples of the nurses' opinions on these topics are given as follows and in Table 3.

"*The presence of a nurse in the national pandemic science board . . . we are with the patient for 24 hours. I think that the nurse should be consulted about the decisions and measures taken- . . . .* " (N20)

Theme 6: Expectations

Sub-Theme 1: Improving Personal Rights

Policy expectations from the country's health ministry authorized persons about improving personal rights inadequacies such as low salary, poor engagement (insufficient participation in decisions connected to not having a representative in the Coronavirus Scientific Advisory Board), less benefits, and lack of job description (determination of the place of the nurse within the team/to be seen as a multidisciplinary team member), were prioritized during the fight against the COVID-19 pandemic.

"*I think the job descriptions of nurses should now be clearer and more precise . . . Nurse participation should be ensured in the national pandemic science board. I want to improve personal rights, remove unfair wage distribution such as revolving funds, and make remuneration under a single salary framework. I want health workers who lost their lives due to infectious diseases at the beginning of their duties to be considered martyrs*" (N31).

Sub-Theme 2: Psychosocial Support

The provision of institutional psychosocial support services in struggling perceived individual and interpersonal level challenges was determined among the institutional/organizational expectations of nurses. Based on the results, 30 of the participating nurses reported that they need/expectant psychosocial support to cope with psychological problems such as psychological distress, fear of getting a virus, fear of infecting their relatives, and childcare problems.

"*The role of the nurse in the epidemic is quite high, and all the care and treatment of the patients are carried out by the nurses. There are serious labor and sacrifice. Psychological difficulties,*

Table 3. Themes and some of the nurses' expressions according to sub-themes

Theme 1: Intrapersonal challenges
Psychological distress
"I am going through a very heavy and stressful process emotionally. I have a fear of death, I am afraid of not seeing my children, I started grinding my teeth at night" (N7). "During this pandemic period, it was difficult for me to accept this process at first, but when the number of cases increased, I accepted this process. In a depressing way . . . we had a working life in fear of getting infected, and I feel very tired psychologically due to a busy working life in this process . . . ." (N19).
Dilemma: Keep them alive or survive?
"Fear was foremost in this process. Fear of contagion, rather than infecting ourselves, rather infecting our household, our children, our relatives, this scared us more and worried us . . . (N6)."
Theme 2: Interpersonal challenges
A war but two fronts
"Since my spouse is a health worker, we have to work alternately. . . . so, my child only sees one parent at once. He/she misses us when we have to stay at the hospital. . . . this has been difficult for all of us. I talk to my own parents on the phone because of the risk of contamination" (N1).
Theme 3: Organizational/Institutional challenges
Workload Increased
"Since it is necessary to approach the patient with protective equipment in the care of the patient with COVID, putting on and taking off protective equipment greatly increases the workload. Working with this equipment can be quite challenging" (N21). "Although we have been monitoring and caring for COVID positive patients for about two months, we still have no protective overalls and visor but have to wear two box shirts on top of each other. Working with sweat dripping from my hair, not being able to breathe with an N95 mask, and not being able to see clearly due to fogged up glasses and screens create difficult-to-describe strains during inpatient care" (N32).
Safety and security
" . . . I do not feel safe. For example, our nurses' restroom has a closed ventilation system and I think it is not ventilated enough. Since our restrooms are small, our opportunities to maintain social distance are decreasing according to the number of employees . . . " (N35).
Theme 4: Community challenges
Social insensitivity –stigmatization
"No matter how much people were warned about contamination and transmission, there were also people who did not follow the rules. After we warned them, we were even exposed to mobbing" (N37).
Theme 5: Policies and system challenges
Failure to make their voices heard
"I think that nurses should make their voices heard for saying and playing a role in policies regarding increasing the public's sensitivity to infection control measures, improving the personal rights of nurses such as salary, determining the place of the nurse within the team, increasing training activities . . . ." (N39).
Theme 6: Expectations

fear of catching a virus, fear of infecting relatives, stress are examples of professional problems that we want support during the process." (N21)

Discussion

The findings obtained from this qualitative study, carried out to determine the experiences and difficulties of nurses during the COVID-19 pandemic in Turkey, were discussed in the light of literature under the following main themes.

Intrapersonal Challenges

Almost all nurses reported fear, anxiety, and psychological distress. Shen et al. reported in their study of nurses working in the intensive care unit that the main psychological manifestations were nervousness, frequent crying, and even suicidal thoughts.[8] A previous study examined the workload of 180 clinical nurses and a high-stress level was reported. Fear was the most common emotion that accompanied stress.[23] In China, a survey of 1257 physicians and nurses showed that health-care providers have high depressive symptoms, anxiety, insomnia, and overall distress during providing care for patients infected with the virus.[24] A meta-analysis investigating the psychiatric impact of COVID-19 outbreak on health-care workers showed that indirect traumatization was high enough to exceed psychological and emotional tolerance.[25]

The nurses expressed that they were not only worried about getting infected but afraid of transmitting the infection to others during the care process. During pandemics, the health-care workers' fear of being infected is reported to be higher than that in the general population. Seeing their colleagues are being intubated, losing patients, and the fear of transmitting the disease to their families and loved ones can disrupt the feeling of security.[26] Morley et al. reported that the safety of nurses and other health-care professionals working in the frontline against COVID-19 is an urgent ethical concern.[27] In related studies, the lack of full protection for nurses across the health industry raises ethical questions about the extent of their duty, lack of PPE, and the risk of failure of PPE.[28–30]

Interpersonal Challenges

The other reason that might put nurses on frontline at risk of psychological problems is their worries about their families and children. The current study determined nurses experienced difficulties regarding their family duties during pandemic, such as restricted communication with their families and close relatives, not being able to see their families due to high risk of infection, anxiety, the fear of transmitting the virus to their families, and difficulties caring for their children. Coşkun Şimşek and Günay reported that, not only prolonged separation from family members during the epidemic, but also experiencing anxiety involving their relatives' health, cause psychological difficulties in health

personnel.[31] Another study on the subject emphasized that nurses experience fear of transmitting the virus to their families, friends, or colleagues.[32] Whereas, many health-care workers provide services under pandemic conditions, they are still obliged to look after the education of their children who cannot attend school, to cook for and provide hygiene needs to their children, and to deal with intensive housework after the heavy emotional and physical pressure they experience every day in the hospital. Moreover, health-care professionals who have to take care for older or disabled family members and children have problems fulfilling these responsibilities because of the risk of virus transmission. The increased workload at home can increase the risk of both professional and domestic burnout syndrome among health-care professionals.[33]

Organizational/Institutional Challenges

Most nurses reported that they felt uncertain during the pandemic for their own safety due to factors such as insufficient or lack of PPE, not being able to be tested in situations with a risk of infection, negligence in emergencies, poor physical structure of the hospital, and having to work in a unit where they are inexperienced. It is reported that nurses have the potential for direct or indirect exposure to patients or infected medical equipment and devices during their care and treatment of patients with COVID-19.[34] In this regard, it is important to carry out the necessary arrangements in common areas of hospitals such as the cafeteria, locker rooms, and toilets to prevent cross-infection.

Nurses reported they experienced long and difficult working hours with PPE. Working time is a factor that directly affects the severity of stress responses of health-care professionals. As the working time in the relevant unit of the hospital increases, the frequency of interaction with the patients and a load of protective clothing and equipment used against contamination also increases, causing increased emotional exhaustion.[26,35] The study by Muz and Erdoğan Yüce found nurses expressed wearing of PPE and working in it while entering an isolated patient room was physically tiring.[16] Moradi et al. found nurses experienced excessive workload as a challenge. No leave of absence, shortage of nursing workforce, and heavy shifts were indicators of excessive workload in nurses providing care for patients with COVID-19.[36]

Community Challenges

In the present study, because of the social insensitivity and stigmatization that nurses encounter, difficulty in infection control, violence, and difficulties in the use of public transportation were experienced because they are seen as a source of contamination, which then leads to exclusion and stigmatization. Some previous studies with findings similar to the current study reported that health-care professionals and their family members are seen as potential virus carriers by the community, thus, stigmatized.[37–39]

Policies and System Challenges

Nearly half of the participating nurses thought that there should be a nurse representative on the scientific board, so they can share the knowledge and experience in developing policies for the pandemic. In their study comparing international policy responses to COVID-19, Riley et al. reported that there was not a single credible source of information, but there was too much noise, and that politics, not science, was at the forefront of pandemic management.[40] The challenges caused by the absence of a nurse representative in

the Scientific Advisory Board and its effect on pandemic management may be the subject of future research.

Expectations

The participating nurses stated that they want an improvement in personal rights, determination of the place of the nurse within the team/to be seen as a multidisciplinary team member. Similar to the results of this study, Muz and Erdoğan Yüce found that nurses had expectations for the development of personal and social rights.[16]

In this study, nurses reported that they need psychosocial support. A study carried out in China reported that adequate training and psychological support for nurses facilitate voluntary efforts during a pandemic.[41] Protecting the mental health of nurses, who significantly support the fight against COVID-19, is also important in terms of controlling COVID-19.[8,23] The studies of Kim et al. determined that social support positively affected the job engagement and retention of nurses struggling to fight COVID-19 pandemic.[42] Fang et al. found that health-care workers most want to receive 1-to-1 psychological counseling and provide crisis management.[43] In their systematic review and meta-analysis, Galanis et al. emphasized that preparing nurses to cope better with the COVID-19 pandemic is an urgent need.[44]

Limitations

This study was conducted with nurses working in pandemic hospitals in Turkey. As this research was conducted in Turkey, results may not be generalizable to other cultures and countries.

Conclusions

This study addressed challenges perceived by nurses related to intrapersonal, interpersonal, institutional/organizational, community, policy factors during the COVID-19 pandemic. Based on the results, almost all nurses reported fear, anxiety, and psychological distress. Nurses experienced not only anxiety and fear of getting infected but also fear of transmitting the infection to others during the care process. Most of the nurses reported an workload increased. Nurses reported that they have difficulty in ensuring their own safety due to factors such as insufficient of PPE. Nurses felt fear of transmitting the virus to their families and experienced difficulties in caring for their children and doing some domestic responsibilities. Because of the social insensitivity and stigmatization nurses encounter, they had difficulty implementing infection control. Nearly half of the participating nurses stated that they could not make their voices heard enough due to the lack of nurses in the Coronavirus Scientific Advisory Board.

The present study additionally drew attention to nurses' expectations during the pandemic. Nurses' expectations from the country's health ministry policy-makers and their own intuitional managers were determined as additional psychosocial support, including a nurse representative in Coronavirus Scientific Advisory Board and ensuring their participation in decision-making, and improvement of their personal rights such as salary, engagement to the decisions, etc. Counseling and support programs should be established for nurses to develop strategies to cope with psychosocial problems, especially working in difficult conditions. Nursing management should focus on recovery plans to improve nurses' health. All policies, including those related to the pandemic period, should be reviewed for the status of health workers to improve employee rights and the working environment. In this context, policies can be developed for health-care

professionals and nurses to reward their efforts, awards such as financial bonuses, promotion of the profession, and honors.

The most important contribution of this study is to address individual, multi-level social, and systems factors, and increase understanding of nurses' experiences at the individual, professional, family, and social levels during COVID-19 pandemic. This study revealed the need to develop health-care protocols for nurses to provide safe patient care. The results of this study can be a guide for action plans to be prepared to empower, support nurses, and creating pandemic and family support systems in the fight against COVID-19. Both during the pandemic process and when health care is back to "normal," ongoing support for nurses' well-being will remain critically important.[45] To understand the challenges faced by nurses, encourage them, and ensure that they are supported by the national policies and society, it is recommended that professional organizations carry out awareness-raising activities.

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