



# Views and Experiences of Nurses during the COVID-19 Pandemic: A Qualitative Study

*Hemşirelerin COVID-19 Pandemi Sürecindeki Görüş ve Deneyimleri: Nitel Bir Araştırma*

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## Abstract

**Introduction:** Coronavirus pandemic showed that the number of nurses and the management of personal protective equipment (PPE) posed challenges in meeting the increased demand worldwide. The aim of this study was to determine the experiences and views of the nurses on the management of the nurse workforce and materials/equipment in providing nursing care during the coronavirus disease 2019 pandemic.

**Methods:** Qualitative design was used in this study. A phenomenological approach was followed to collect data by administering focus group interviews in February 2021. The views of 37 nurses working in hospitals in seven geographic regions of Türkiye were obtained. Interview data were analyzed using content analysis.

**Results:** The views and experiences of the participants were grouped under five themes, summarizing seven subthemes and 22 open codes. The results of the study indicated that “not having/accessing PPE to protect nurses and patients from infection contamination” and “working with protective equipment for long hours” were the most frequently witnessed problems. In addition, participants reported that they were not understood by health care managers and felt lonely.

**Discussion and Conclusion:** Nurses have been fighting at the forefront of this disaster. However, in recognition of how sacred and valuable life is, nurses fighting against coronavirus should not be left alone and must be supported by health care managers and decision-makers.

**Keywords:** COVID-19 pandemic; Nursing; Qualitative research

COVID-19 disease has affected a large number of people in Türkiye, as well as all over the world, and has led to a crisis in the health system.<sup>[1–3]</sup> During the first pandemic of the twenty-first century, the number of infected people who have

lost their lives and become ill due to the virus has gradually increased, and it has not been completely eliminated despite vaccination.<sup>[4–6]</sup> In addition, during this pandemic, nurses worldwide were at the forefront of the fight against the epidemic.<sup>[7,8]</sup>

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The COVID-19 pandemic process, which is a disaster, has changed the roles of nurses in emergency care management and critical patient care, and problems such as uncertainty, heavy workload, employing nurses who have not received adequate training and who do not have the experience required by the unit (especially in specific and critical areas such as intensive care units), unsuitable patient/nurse ratio, fear, and burnout have been reported frequently by nurses.<sup>[9-11]</sup> In addition, the absence of nationally determined standard care algorithms and the change of practices from hospital to hospital prevented the whole society from receiving the same quality of care and led to a situation that could be interpreted as a violation of patient rights, although there are treatment and case management algorithms on how to treat a patient with COVID-19.<sup>[12-14]</sup> Although a national epidemic planning system was in place for the COVID-19 pandemic in Türkiye, nurses have not been involved in this planning process and were not included in the scientific boards that took an active role in the management of the pandemic process.<sup>[15]</sup> As a result, significant problems arose in the organization of the nurse workforce and personal protection equipment (PPE), which are so important in the pandemic.<sup>[16,17]</sup> Prepared COVID-19 hospital pandemic plans are incapable of providing clear directions on how the nurse workforce would be organized, how their continuity would be ensured, and how the supply and continuity of personal protective equipment (PPE) would be provided.<sup>[18,19]</sup>

This study aimed to determine the experiences and views of the nurses on the management of nursing workforces and materials/equipment in providing nursing care during COVID-19 in Türkiye.

## Materials and Methods

This research was carried out with the phenomenology pattern, which is one of the qualitative research methods.<sup>[19]</sup> The sampling method, which is nonprobabilistic and more appropriate for qualitative research, was used to obtain the views and experiences by using focus group interviews with the help of semistructured questions. Participants were reached by snowball sampling, which is one of the purposive sampling methods.

## Participants

Four focus group interviews were held by using the semistructured questionnaire. The views of the total 37 nurses working in the Ministry of Health (MoH), private and university hospitals in 15 provinces, and seven geographic

regions of Türkiye were collected. Four focus group interviews were conducted online in 2 days (February 9–10, 2021). The mean number of participants in the four focus groups was 9 (minimum 7, maximum 11). Each focus group interview lasted on average for 2 h.

## Data Collection

The participants were reached by phone and informed about the research, and then an appropriate date and time for nurses agreeing to participate in the study were scheduled for the focus group interviews. Before the interviews, nurses were asked to fill out a form consisting of 11 questions to determine their age, gender, province and institution where they work, weekly working hours and working style, the number of patients cared for in the units they work, and whether they received education/information about the COVID-19 pandemic in the clinics they work. During interviews, a semistructured form including 6 questions was used to gather data on the availability of PPE and materials, nursing services management, their experiences with the working environment or conditions, and recommendations of nurses during the COVID-19 pandemic process. Additional in-depth questions were asked to increase the clarity of the answers if needed. Each focus group interview was administered by a moderator, who was assisted by an observer moderator. During the focus group interviews, an effort was made to encourage the nurses to answer the questions honestly and to participate in the discussions. In addition to the video recording, the assistant moderator also took notes during interviews.

## Statistical Analysis

Colaizzi's phenomenological data analysis process consisting of seven stages was used in the analysis of the respondents' views.<sup>[19]</sup> According to this method, at the first stage, two researchers (HS, MSK) listened to the recorded interviews in detail and transcribed them in Microsoft Word. In the second step, all transcripts were separately read by the researchers (SŞÇ, YÇ, AAÖ, HS, MSK) several times. After detailed readings, important repetitive statements were determined by the researchers. The consistency of important statements and the number of repetitions were checked by two researchers (SŞÇ, HS). In the third stage, meaningful expressions were brought together by two researchers (SŞÇ, HS), and the context, themes, and subthemes were created. Quotes from the nurses' statements about their experiences during the COVID-19 pandemic were determined and integrated into the subthemes. In the fourth stage, similar codes were grouped into themes and sub-

themes. The created content, themes, and subthemes were reviewed by the researchers, and a consensus was reached through discussions. In the fifth stage, the themes and subthemes were created to explain the phenomenon of the experience of nurses during the COVID-19 pandemic process. The statements of the participants, who revealed the necessary details for the description of the phenomenon, were summarized. In the sixth stage, the themes, subthemes, and abstract expressions were checked by the researchers (ŞŞÇ, YÇ, AAO, HS, MSK). Consensus statements were used in the basic structure of the study. In the seventh stage, researchers (ŞŞÇ, HS) received feedback from the participants whose statements were included in themes and subthemes to compare whether the findings accurately reflected the nurses' experiences. Participants did not give any negative feedback on the results, and the results were confirmed. No specific information about the nurses was provided to protect their identity, but nurses' age or gender was provided just after their statements.

SPSS (Version 23) statistical program was used to analyze the demographic data. Percentile, frequency, minimum–maximum values, mean, and standard deviation statistics were used in describing the collected data.

### Rigor/Trustworthiness

The reliability, transmissibility, and probability proposed by Rigor, Lincoln, and Guba were considered to increase the rigor/trustworthiness of the study.<sup>[20]</sup> The reliability of the study was ensured by clearly informing the nurses about the study, video-recording including the long-lasting interviews, and taking notes by the reporter during the interviews. The transmissibility of the study was ensured by inviting nurses from different institutions with different professional experiences and explaining the entire process of the study in detail. The findings were reported by quoting the nurses' own statements. Finally, to increase the approvable/verifiability of the study, consistent interaction and sharing of information were carried out by the research team during data collection and data analysis.<sup>[21]</sup> Verifiability was also ensured by the use of the COREQ checklist (Appendix 1).<sup>[22]</sup>

### Ethical Consideration

The necessary administrative permission and ethical approval for the study were obtained from the Ethics Committee of a University (Protocol no.: 2020. 307.IRB3.114, date July 03, 2020). Informed consent was obtained from the participant nurses before the interviews. The study was conducted according to the Declaration of Helsinki.

## Results

The sociodemographic characteristics of the nurses are presented in Table 1. The average age of the nurses was 31.59 years (SD: 6.76). Of them, 70.3% were females, 70.3% were working at public hospitals, 43.2% were working at intensive care units, and 48.6% were working on a 24-h shift. In addition, the mean number of patients cared for by a nurse in the unit was 22.78 (SD: 37.51). Of the nurses, 56.8% stated that they had received COVID-19 training during working hours, 29.7% of the training was provided with guides, 24.3% of the training was provided with training and guides, and 21.6% of the nurses stated that they had not received any training (Table 1).

The content analysis grouped the views and experiences of nurses under five main themes (Table 2). These themes were provided and described by mentioning subthemes and open codes briefed below.

### Theme 1: Pandemic Experience

The burden of the pandemic was described as "heavy" by the nurses stating words of uncertainty, chaos, fear, exhaustion, and loneliness frequently. All these words might indicate that nurses have been exposed to mental health as well as psychological problems such as stress, anxiety, and depression as forefront workers in their working environment. One-third of nurses mentioned that they could not find a reliable source to get information about the infection and contamination, as well as methods of protection. The main causes of the chaos were the confusion and instability surrounding nurses regarding what to do. The nurses experienced confusion due to the uncertainties at the beginning of the pandemic, and the managers did not take an active role in the personnel planning and job location changes as well as providing orientation training programs for newcomers. Additionally, they stated that they had conflicts in the new teams which were created for the COVID-19 intensive care units. For instance, the nurses who have been working in children's services for many years have been assigned to adult clinics. The nurses, especially those who first encountered COVID-19, expressed their fear of being infected with the virus and transmitting the disease to their families. Some of the nurses expressed a sense of loneliness due to the fact that managers did not assess the situation by visiting clinics, and doctors were not willing to take an active role in patient care.

Nurses used the following expressions or open code keywords to describe their working environment:

...At the beginning of the process, we were extremely uncertain. We started this process without having enough information about care protocols, how to monitor and follow this disease, and what to pay attention to... (N1, 44A, F) ... We experienced difficulties because there were disagreements, the treatment did not work, a physician ordered a treatment but another one changed and said that this wouldn't happen... (N4, 28F, F)... The excessive deaths affected us a lot. Psychologically, it was a very exhausting process... (N8, 27A, F)... I have been working for 25 years and I have never felt so lonely professionally in my life. We had an environment where administrative staff waved through the windows, closed the door when they saw us... (N11, 44A, F)

## Theme 2: Nursing Services Management

The reason why the management of nursing services is described as the dark side of the coin is that nursing services managers cannot meet the expectations of the nurses. Under this theme, three open codes summarized problems in inappropriate assigning, crisis management, and inadequate managers in the pandemic process were listed. The nurses stated that they were assigned to pandemic clinics and intensive care units without orientation training, there were too many workplace changes, and there was no prior notice before the assignment. They also stated that the isolation planning of wards, infection control, and disaster management plans for the training of health care personnel were insufficient. They could not reach either nursing managers or other managers to tell the witnessed problems. The nurses used the following expressions to mention their needs and wishes that were not fully understood.

... Nurse managers did not manage processes... They did not evaluate what we needed...Our calls did not get much response... (N1, 44A, F) ...They set up a group on WhatsApp .... Then we were instructed to download this program. We were told it would start tomorrow. There was no organization... (N14, 32A, F)

## Theme 3: PPE and Medical Supplies

The experiences and views of nurses on PPE and medical supplies were categorized under three subthemes that were PPE management, working difficulties with PPE, and poor physical infrastructure and insufficient medical durables. PPE management summarizes the problems experienced in the planning, distribution, and stocking of med-

**Table 1.** Nurses' sociodemographic characteristics

Categorical variables	n	%
Gender		
Woman	26	70.3
Man	11	29.7
Type of hospital		
Public hospital	26	70.3
University hospital	11	29.7
Department of work		
Emergency service	7	18.9
Inpatient service	7	18.9
Intensive care unit	16	43.2
Outpatient clinic	4	10.8
Other*	3	8.2
Work schedule		
8 h shifts	9	24.4
12 h shifts	2	5.4
16 h shifts	8	21.6
24 h shifts	18	48.6
Training about COVID-19		
Trained	21	56.8
No trained	8	21.6
Partly trained	8	21.6
Being informed about the working environment and working conditions during the COVID-19 pandemic		
Informed	10	27.0
Uninformed	12	32.5
Partly informed	15	40.5
Type of provided training materials specific to the department worked during the COVID-19 pandemic		
No provided material	8	21.7
Only training	9	24.3
Only guideline	11	29.7
Both training and guideline	9	24.3
Continuous variables	Mean (SD)	Min–Max
Age	31.59 (6.76)	23–46
Weekly working hours	48.86 (8.43)	40–72
Number of patients cared for by a nurse in their department	22.78 (37.51)	0–200

\*: Community mental health center, physical rehabilitation center, and radiology unit; COVID-19: Coronavirus disease 2019; SD: Standard deviation; Min: Minimum; Max: Maximum.

ical supplies and equipment. Nurses stated that PPE, in particular, were provided to them in a limited number by requiring signature and they bought PPE from outside with their own money at the beginning of the pandemic. The production of this equipment has increased, but the differ-

**Table 2.** Themes, subthemes, and open codes based on nurses' experiences and views

Theme	Subtheme	Open codes
Pandemic experience	Heavy burden of pandemic	<ul style="list-style-type: none"> <li>• Uncertainty (n=11)</li> <li>• Chaos (n=21)</li> <li>• Fear (n=5)</li> <li>• Exhaustion (n=5)</li> <li>• Loneliness (n=6)</li> </ul>
Nursing services management	Dark face of the coin	<ul style="list-style-type: none"> <li>• Problems in assigning (n=29)</li> <li>• Crisis management (n=12)</li> <li>• Inefficient managers to manage pandemic (n=14)</li> </ul>
PPE and medical supplies	PPE management	<ul style="list-style-type: none"> <li>• Inadequate PPEs (n=15)</li> <li>• Low quality PPEs (n=10)</li> <li>• Difficulty in accessing PPE (n=9)</li> </ul>
	Working difficulties with PPEs (n=17)	
Working conditions and environment	Poor physical infrastructure and insufficient medical durables	<ul style="list-style-type: none"> <li>• Inadequate physical infrastructure (n=12)</li> <li>• Insufficient medical durables (n=6)</li> </ul>
	Long and lonely working shifts	<ul style="list-style-type: none"> <li>• Long working hours (n=10)</li> <li>• Over workload (n=13)</li> <li>• Being forefront workers during the pandemic (n=9)</li> <li>• Inadequate psychological support (n=5)</li> <li>• Ban to go to the street (n=1)</li> </ul>
Recommendations for nursing services	Restructuring nursing management	<ul style="list-style-type: none"> <li>• Merit-based management (n=10)</li> <li>• Prioritizing disaster management during education (n=3)</li> <li>• Improving salaries (n=3)</li> <li>• Regulating working hours (n=7)</li> </ul>

ent quality of provided PPE has become a major problem for nurses. The nurses said that PPE was primarily provided to managers and physicians but not provided to nurses and cleaning staff. They also stated that the nurses in charge kept them locked in their rooms, and the needed materials were given in numbers. PPEs such as overalls, N95 masks, and face shields caused some physical problems such as sweating, dizziness, and difficulty breathing while providing care to COVID-19 patients. The physical infrastructure of hospitals and medical supplies were insufficient and inadequate in the management of the COVID-19 pandemic, and there were inadequacies in the intensive care unit and isolation environment required for patients, as well as in the arrangement of dressing rooms, changing rooms, dining, and resting areas for health care personnel. The nurses stated their views on PPE and medical supplies by saying that:

*....Maybe, it was unbelievable but we sewed our overalls, we used our own visor and we bought them with our own money...(N19, 46A, F)...Terrible masks were distributed. Transparent and net curtains were provided instead of surgical masks...(N14, 32A, F)...The different brands for*

*surgical masks ....and the qualities of the box gowns were so different, their ties broke off... (N20, 39A, F)... Incoming supplies were locked in the closet and nurses were given enough masks for a week... (N21, 44A, F)"... When I would enter the room for an hour with protective equipment, I would feel tired, I would have difficulty breathing, and I would sweat. (N1, 44A, F)...During the period when COVID-19 peaked, we used to take a mask from one patient and put it on another patient and then when the saturation fell, we took it off and put it on again. ...I bought the saturation device from a medical supplier with my own money just to have it with me... (N14, 32A, F)*

#### Theme 4: Working Conditions and Environment

The nurses stated the words "long and lonely working shifts and hours, over workload, and being at the forefront without getting inadequate psychological support" to describe working conditions and environment. Some of the nurses stated that they worked 24 h a day to the staff circulation in the hospital, and they worked more than 40 h a week

due to the lack of nursing staff. They experienced excessive workload due to an insufficient number of staff, excessive number of patients, and working hours; especially in intensive care units, different tasks were assigned to nurses other than nursing duties. In addition, nurses stated that they needed transport vehicles to reach their hospital due to curfews during the pandemic and the lack of a private vehicle. The participants described these problems by stating:

*...24 hours in a day and 4 nurses are on duty in the 13-bed intensive care unit....we fought a war for 6 months without knowing what the war was... (N22, 32A, M)...The secretary is missing; we did his job. The staff is missing, do his job, check it. It is not my duty to supervise all of these. But you are responsible for everything. You also supervise the work that the physician has to do... (N13, 32A, F)...Physicians have been hesitant to work in and even come to the doors of ICUs, but we spent 24 hours in it... (N2, 26A, M)... We were the first group every time to see the disappearance of someone's family member. The whole family is in bed and we have seen that we have lost them all one by one. Psychologically, we were really left very alone; no one was with us...(N16, 30A, F) ...so I received psychological support for about a month. We have faced and witnessed a lot of deaths. That's why I was so worn out in this process...(N24, 25A, F)...Transportation during curfews, on weekends... that is, not everyone has a private vehicle. Hospitals could not provide transportation.... (N3, 30A, M)*

### Theme 5: Recommendations for Nursing Services

The last theme includes recommendations for nursing services. The majority of recommendations require restructuring nursing management. Nurses suggested that management should be based on merit, and managers should be appointed among the nurses who are aware of their nursing duties, powers, and responsibilities, who have received their postgraduate education level (master's/doctoral), preferably specialized in the department of management. The nurses indicated that disaster management should be given importance in their subsequent nursing education because they did not have sufficient knowledge, training, and experience in disaster management during the COVID-19 pandemic. Inadequacy and inequality in the salaries of nurses were mentioned as a problem when one considers long and exhausting working hours during the COVID-19 pandemic. Nurses stated that working 24 h

was exhausting and wearisome, and the virus infection increased because they spent a long time with the patient, and the quality of care of the patients decreased. In addition, the nurses suggested that working hours in COVID-19 and similar epidemic situations should be organized according to the experience of the nurse, the density of the unit, the condition of the patients, and the number of nurses. They suggested the following expressions to improve nursing services during the pandemic:

*...Only single recommendation: Managers should be selected on a merit-basis... (N14, 32A, F)...Just like an earthquake drill is conducted and implemented or parses certain tasks in a blue code. It becomes clear who will do what. There could be a team or at least a unit for these kinds of things. ... (N11, 44A, F)...People are demanding overtime because the salaries are not enough. In order to do this, they have to work 24 hours a day... (N13, 32A, F)...If COVID-19 is to be continued as intensive care, I am in favor of working for 8 hours... (N9, 24A, F)*

### Discussion

The health system in many countries collapsed from time to time or faced difficulties during the COVID-19 pandemic. While meeting the increasing demand for health care services with limited resources, the responsibility of providing qualified and safe service was largely placed on health care professionals. Nurses participating in the fight against COVID-19 at the forefront among health care professionals have become one of the most important building blocks keeping the health system functioning. Despite the inadequate number of nurses, all nurses continued to do their jobs under difficult and stressful conditions to maintain the highest level of safe and quality nursing care.<sup>[10,16]</sup> A variety of factors including inefficient managers, a high risk of infection, nursing manpower shortages, isolation and separation from their families, and chaos were experienced in physical and psychosocial problems for the nurses caring for COVID-19 patients.<sup>[23,24]</sup> Our study revealed that the nurses felt a sense of helplessness, hopelessness, and becoming powerless. They had fears due to loss of control over the situation, with their previous knowledge and skills not helping them to deal with the problems of the crisis, and inexperienced nurses were scheduled to work with COVID-19 patients although they did not have the competence to do so. They were also worried about their own health and that of their families, as well as their colleague's health. In addition, the nurses experienced the feeling of

being abandoned by managers, and even the failure of administrators to manage this crisis turned into violence and pressure on nurses. Also, nurses have been facing long working hours, over workload, patient overload, and insufficient psychological support. In addition, in most Turkish hospitals, nurses worked long hours (e.g., 12–24 hours per day) with a small number of nurses, and they were pushed into overtime work. For example, a nurse in tertiary intensive care units had to take care of 6–10 patients. While the suggested working time should be a maximum of 48 h per week, this time had increased to 180 h per week.<sup>[11]</sup> Despite these fears and worries, they continued to work.

Nursing is a profession that requires providing care in close contact and cooperation with patients. Nurses are also responsible for providing many different interventions such as endotracheal aspiration, oxygen therapy, and blood collection, which are important in the transmission of infection. Because COVID-19 is a highly contagious virus, nurses have to use PPE more frequently, such as masks, glasses, gloves, and medical gowns, to protect both the patient and themselves from this infection.<sup>[25]</sup> In our study, the nurses stated that the amount of PPE was not enough and not of good quality. Limited PPE was provided to nurses in exchange for a signature; sometimes, they purchased their own PPE, and there was discrimination in distributing PPE among health care professionals. Many countries, including Türkiye, experienced many difficulties in accessing PPE.<sup>[10,11,26,27]</sup> The diagnosis of COVID-19, due to the inability of a single nurse to reach PPE, has led to an increase in the need for nurses and taking necessary measures to prevent transmission for the care of patients. The nurse shortage was felt severely during the pandemic. The nurses should be considered as both providers of care to patients and also health care recipients who should be protected from the virus.

Factors such as the variety of PPE used during patient care, their weight, careful hygienic use, and frequent change of PPE cause many difficulties and problems. These include excessive fatigue; restricting the consumption of food and liquids to reduce the need for toilets; banding of masks, folding of sleeves of gowns and overalls, women using PPE that is designed for men; the development of pressure injuries; wounds on the hands; excessive sweating; and difficulty in breathing and communicating with the team.<sup>[12,25,28]</sup> In our study, the nurses stated they had negative experiences and physical problems such as sweating, dizziness, and difficulty in breathing due to PPE use while providing care to COVID-19 patients. Hence, this problem was even more daunting.

Due to the high contagiousness and fatality, the COVID-19 patients were followed up in intensive care units and isolation rooms. Nurses in this study stated that they experienced insufficient physical infrastructure in intensive care units due to insufficient medical equipment (oxygen masks, oxygen, and mechanical ventilators) to accommodate the oxygen needs of patients and the transformation of different units into intensive care units. Many countries during the COVID-19 pandemic have planned to increase the availability of ICU beds by creating new temporary ICU beds in institutions. However, many countries have faced a lack of physical infrastructure, especially in the early stages of the pandemic.<sup>[29–32]</sup>

The nurses recommended that merit-based management, emphasis on disaster management in the education system, improvement of salary, and regulation of working hours are vital and mandatory to practice better nursing services management during the COVID-19 and similar pandemics. The results of this study are in line with the results of other studies.<sup>[7,31–34]</sup> Many problems experienced in the COVID-19 pandemic are due to the fact that governments and health institutions are not physically prepared for such pandemics, insufficient investments in nurses and health manpower, deficiencies in preventive health services and health education, and insufficient investments for preventive health services.

### Limitations

This study has a limitation. Self-reported problems by nurses were analyzed, and this may cause response bias.

### Conclusions

At the facility level, there are many things that health care and nurse managers have been expected to do before, during, and after a crisis or disaster. Health care facilities should be ready for crises and disasters by preparing their contingency plans, building scenarios, and developing crisis planning to prevent crises and prepare health care facilities ready for the crises.

Besides, it is necessary to use the thoughts of management approaches effectively in dealing with daily problems caused by COVID-19. The COVID-19 pandemic revealed the importance of learning, intelligence, and information processing as key concepts that we need to give more emphasis on in the coming years. We also learned that masks might be more important than MR machines. It might also be a necessity to train health care employees to give them the ability to carry out multiple tasks. In the early stages

of COVID-19, the most limited resource was experienced nurses in providing care to patients. So, physicians, nurses, and other health care professionals should be ready to share their powers to be strong to combat the risks of the future. We need to design our health care facilities physically in a more flexible way. At the beginning of the COVID-19 pandemic, we needed more ICUs, and we used some inpatient clinics like ICUs. It is unreasonable to build all inpatient clinics like an ICU, but it is also important to transform them into new health care providing areas in a short time when we need them for different purposes.

However, in recognition of how sacred and valuable life is, a big responsibility that falls on the shoulders of executives and decision-makers makes it necessary that nurses fighting against COVID-19 should not be left alone, damaged, tired, and burned out. The most important is that they should not lose hope.

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**Appendix 1. COREQ – Equator checklist for research quality**

NO	ITEM	Description
Domain 1: Personal Characteristics		
1	Interviewer	Researchers (SSÇ, AAÖ, HS and MSK) conducted all interviews
2	Credentials	RN, PhD, research assistant, PhD candidate
3	Occupation	Nursing, Health Management
4	Gender	Female, Male (SK, YÇ)
5	Experience and training	All researcher, experienced in qualitative studies)
Relationship with participants		
6	Relationship established	Zoom meeting was organised
7	Participant knowledge of interviewer	An academic who did work in rural and remote areas when clinical – and Firs researcher is President of Turkish Nurses Association
8	Interviewer characteristics	Third and fourth researchers kept a diary to highlight any unconscious bias
Domain 2: Study Design		
Theoretical Framework		
9	Methodological orientations	This research was carried out with the phenomenology pattern
Participant selection		
10	Sampling	Purposeful sampling
11	Method of approach	Face to face and zoom (online)
12	Sample size	37
13	Non-participation	No
Setting		
14	Setting of data collection	Online
15	Presence of non-participants	No
16	Description of sample	Aged between their 23s and mid-46s and were of both genders (70% female)
Data Collection		
17	Interview guide	A guide containing 11 question was provided by the authors
18	Repeat interviews	Interviews were conducted one time
19	Audio/visual recording	Audio recording
20	Field notes	Yes, fields notes were made before during and after the interviews
21	Duration	Average two hours
22	Data Saturation	Data began to recur in the second focus group
23	Transcripts returned	Yes
Domain 3: analysis and findings		
Data analysis		
24	Number of data coders	Two (1 and 3)
25	Description of coding tree	Categories, themes and subthemes
26	Derivation of themes	Theme derived from the data following Colaizzi's phenomenological method
27	Software	Microsoft Word
28	Participant checking	Yes
Reporting		
29	Quotations presented	Yes
30	Data and findings consistent	Yes
31	Clarity of major themes	This is highlighted both in the paper
32	Minor themes	Presented in the article